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Editor's Introduction:
Who Are Our Contemporary Gadflies?

Douglas J. Simpson
Editor,
Texas Tech University

Socrates is well known for being an intellectual gadfly, questioning many popular or unpopular ideas that were unreflectively assumed by the masses or individuals to be true. He is often viewed as eroding confidence in a host of cherished beliefs, whether ancient or contemporary from his perspective. Many others, both before and after Socrates' time, have been gadflies, too. The value that is placed on Socratic questioning, however, was in his time and still is frequently diminished or dismissed, especially by those who overemphasize economy and efficiency when pursuing goals and outcomes. The dogmatic and ideologically driven of all persuasions have likewise often questioned the value of others' doubts and inquiries. In addition, so-called practical- and action-oriented people are sometimes inclined to write off important controversies as they rush toward simple solutions to complex and complicated issues. Listing oneself as a gadfly, therefore, on one's curriculum vitae may be ill-advised in many situations, especially if one is seeking a position in certain public policy circles or many education preparation programs, unless one can provide cogent evidence that her or his gadflyish tendencies are focused on the approved or sanctioned list of top ten ideas opposed by a set of policymakers or a cadre of professors. One-sided gadflies, so it seems, are commonly preferred over gadflies who engage in critiques of their own ideas as well as appraisals of the beliefs of their family members. Why would any of us welcome criticism of our own deeply admired assumptions, theories, data, paradigms, fads, practices, and prescriptions? Certainly, reigning,

advancing, and passing ideologues too infrequently look favorably on those who critique familial presuppositions and pursuits.

Since we seem more inclined to cross-examine others rather than ourselves, Octavio Paz's claim that we should begin our criticisms with a critique of ourselves appears worth remembering. Likewise, John Dewey's complementary notion that we should allow both orthodox and unorthodox ideas to be studied and examined in classrooms may be a thought that is worth practicing. Nor should we overlook Maxine Greene's ideas of the need for "criticism from within" as well as for seeing things through the eyes of strangers. Of course, there are many factors that may influence whether we or others are consistently or habitually gadflies. Undoubtedly, we may assume—even if such is partially unfounded—we are gadflies if we measure ourselves by the thinking we sometimes see in general society. But are we gadflies among ourselves? Or do we silence one another by our unwritten but newly enshrined beliefs when we attack colleagues rather then their arguments or employ logic stoppers to suggest that further inquiry could only issue from a deep misunderstanding of a sacrosanct idea? Do we look for people who think like we do when we pursue faculty searches or do we want iconoclasts? Do we offer either traditional or progressive candidates in our fields faculty positions? Do we prefer mainstream conservatives, liberals, or radicals instead? Do we welcome intellectual diversity or do we seek to homogenize and indoctrinate our students? If our colleagues have resisted our ideological melting pot, can they earn tenure and be promoted? Do we listen to those who think otherwise in order to learn from them or are we mostly preparing our counterarguments to rebut what we consider an antiquated or dangerous idea that we have heard or inferred? Do we yield to the temptation to believe that our paradigmatic friends are the real gadflies?

At times, of course, it is difficult—as a former colleague once made clear—to distinguish between a horsefly and a gadfly. Consequently, it seems important to distinguish between comments that are horseflyish and gadflyish, those questions and comments that are vicious, mean-spirited, bloodletting, infectious, and counterproductive and those that are probing, educative, revealing, stimulating, insightful, disturbing, and constructive. Even so, a horsefly may suggest ideas that are worthy of our attention, for she or he may also be a gadfly. Even the occasional gadfly is, we may hypothesize, better than the pseudo-ones or those who come with a set of formulistic and standardized objections, accusations, issues, and questions. Fortunately, this responsibility of deciding whether and to what degree ideas, arguments, and research are gadflyish—if it is accepted—ultimately belongs to each person, including the readers of the *Journal of Thought*, not to the editor. Of course, the editor yields to the

temptation to be a gadfly—and horsefly—on occasions. Perhaps this dual temptation is one that all of us encounter, including our current authors even if such is not manifested in their current articles. Whatever the situation, we hope you will find at least several of the enclosed articles provocative whether the authors are questioning current or past conventions or prevailing or passing assumptions. Ideally, the authors will enable us to question our own presuppositions and beliefs, not just the assumptions and ideals of those they are interrogating.

The first essay is "Situating History So It Counts: Learning from Education History's Shift toward Marginalization in U. S. Teacher Education" by Sonia E. Murrow. Murrow may or may not appear to be an early twenty-first century gadfly to us. All gadflies, of course, do not look or question alike. To others of us she may seem to be a gadfly both within her specialty (history of education) and outside of it in the broader field of educator preparation. She claims—manifestly a minority inclination in the world of educator preparation programs—that the history of education is sufficiently important to include in programs today. But she adds twists to her thinking about the claim that merit attention by even the most pragmatically oriented person. Should we give serious thought to integrating the history of education across educator preparation curricula? she asks. Obviously, she and her ideas are dangerous when measured by the reasoning behind many contemporary preparation programs.

Paul A. Wagner, in "Probability, Decision Theory, and a Curricular Approach to Developing Good Thinking," may immediately strike a few of us as someone who is a horsefly. Who—other than someone neatly consigned to a fundamentalist commune or a modernist cul-de-sac—writes about the importance of moral matters and a search for truth today? Or, perhaps, we may think that Wagner offers us neither the ideas of a gadfly nor a horsefly but, instead, those of a barfly. Has he imbibed too long with the ghosts of pedagogy past, the spirits of the curricular elite, or the souls of educational dreamers? Are his proposals realistic and futuristic even if partially rooted in a few ideas that are tinged with the heresies of the dead? And what are we to make of his discussion of probability and decision theory when many—or, perhaps, most—education policymakers are so certain of their prescriptions that they allow little to no room for educators to make genuine educational decisions? Are we to conclude that his ideas are both antediluvian and utopian? Or, on the other hand, are we misinterpreting him? Among other ideas, Wagner offers a rationale for interdisciplinary studies that are designed to provoke imaginative and problem-solving capacities. But after working in contemporary schools and universities, who can possibly have any imaginative or problem-solving abilities left?

Jodi MacQuarrie's "Against Interpretation" represents, at least for some readers, more gadfly-like questioning. Not only does she suggest there is much for classroom teachers to learn from psychoanalytic thought and practice (particularly the theory of D. W. Winnicott), she has the audacity to propose that we need to know less about our students. Know less about our students? Yes. No doubt, some will welcome this plea for more ignorance. But before we abandon the usual encouragement to understand our students and their worlds, we seem well advised to find out precisely what Winnicott and MacQuarrie recommend. Likewise, studying MacQuarrie's reflective blending of ideas from Nel Noddings, Vivian Paley, Martin Buber, Paulo Freire, and Friedrich Nietzsche with Winnicott's seems appropriate. In the end, she wants us to ask whether we are too invasive and impositional in the name of education. Are we guilty of having a blind spot in our inquiry about imposing ourselves on students? Dare we reintroduce the old-fashioned Buberian concept of I-Thou relationships in classrooms?

JoAnn Klinker demonstrates in "Qualities of Democracy: Links to Democratic Leadership" that on-going critical inquiry is needed in the field of educational leadership, an arena that frequently if not normally leaves little time for practitioners to be gadflies. In particular, she argues that reflecting on and applying democratic ideas and ideals, especially those regarding the substantive democratic qualities of responsiveness, equality, and respect for civil and political freedoms, are critical means of nurturing democratic leaders and schools as well as democratic governments and societies. Among other claims that are worthy of attention is the one that argues that emerging democratic schools, like countries, should be careful that personal agendas by educators do not result in impositions in the name of democracy. Is she cautioning us against so-called democratic invasions of traditional schools with their hierarchical cultures? Klinker's advice, if acted on, may assist in revolutionizing many school cultures and classrooms. But would her advice lead to the cultivation of students who score high on standardized achievement tests? And why should educators be interested in nurturing children who will help democratize schools and society when we only need good—i.e., competent and dependable—workers who will keep our economy vital and competitive? Can there be such as thing as healthy democracies *and* economies?

In "A Good Idea Gone Awry: A Comparative Study of Jefferson's *Bill for the More General Diffusion of Knowledge* and Bush's *No Child Left Behind Act*," Edward A. Janak illustrates Murrow's claim about the importance of knowing educational history. But Janak could never be a gadfly, for historians only discuss the past which by definition is a

temporal, spatial, and emotional abstraction—or should we say distraction?—that is oblivious and irrelevant to present-day and future interests. For some unexplainable reason, Janak—like Murrow—ignores the notion that history is irrelevant to evaluating contemporary issues and present-day laws. So, he injects queries throughout his study and closes as any insightful gadfly would by inquiring, "What then would Jefferson think of NCLB and the administration that created it?" Fortunately, having dialogued this morning with Jefferson, I am certain about his answer. Briefly—and politely—stated, Jefferson said that many of his worst fears, educationally speaking, are represented in NCLB and most of his greatest worries arise when he thinks of this administration. Still, you may wish to compare Janak's answer to this question with Jefferson's most recent comment on the subject. People—even presidential gadflies—do change their minds. And, perhaps, as unlikely as it may be, historians are gadflies at times.

Muthu Kumar's questions and reflections contained in "Organizing Curriculum Based upon Constructivism: What To Teach and What Not To" should never be allowed to cross the closed minds of those who are philosophically embedded in contemporary constructivist ideology. Anyone who is even partially inducted into the sacred teaching of Saint Construct immediately knows with absolute certainty that Kumar is a horsefly, not a gadfly. Or, to be generous, he may be a barfly like Wagner. But there are no signs of his being either mean-spirited or intoxicated. Could he be a gadfly and be thinking about his former thinking? Has he rejected some of his formerly prized ideas? While a constructivist, Kumar is neither a dogmatic nor superficial one. He offers a cross-disciplinary model for thinking about when prerequisite information and understanding is needed and when a constructivist approach to learning is appropriate. For him, either-or thinking about knowledge development is a tendency that is worth rejecting.

"A Destructive Dialectic: The Menace of Egalitarianism and Self-Esteem" by Gregory K. Stanley offers another critique—one that will be both cursed and praised. Why? Because he has written an editorial about two revered notions in some educational circles: the importance of building the self-esteem of students and the belief that being thoroughly egalitarian in school is both pedagogically demanded and ethically prescribed. The anecdotal, experiential, and interpretative lenses that Stanley offers may be immediately welcomed by those who think similarly and quickly rejected by those who think differently. But should we merely celebrate a piece that at long last affirms our own much cherished impressions? Or should we simply castigate an essay that affirms the distasteful opinions of our intellectual opponents? The

question we select and the answer we provide may depend in part on whether we are gadflies or horseflies. Or, alternatively, whether we are becoming barflies.

This issue closes with an introduction to a collection of essays on school-business partnerships. In her review of *Schools or Markets? Commercialization, Privatization, and School-Business Partnerships* edited by Deron R. Boyles, Jacqueline Romano contends that educators and educational policymakers need to rethink many, probably most, school-business partnerships. Finding the essays in the work challenging and balanced, she recommends that we—educators, parents, citizens, and policymakers—read the work. She is especially interested in our pursuing questions that go beyond clichés and ready-made queries and that reach beyond our emotional and intellectual borders. Fortunately, she does not mention gadflies, horseflies, and barflies.

Situating History So It Counts:

Learning from Education History's Shift toward Marginalization in U. S. Teacher Education

Sonia E. Murrow
Pace University

Introduction

In the 1970s, education scholars were compelled to argue education history's virtues to the teacher education enterprise, asserting for example that teachers should play important roles in the formation of education policy and so need to be informed about education history (See Birkel, 1972; Travers, 1973). Although these scholars were responding to history's diminishing status in teacher education, as they perceived it in the 1970s, a shift had begun much earlier.

Interestingly, an examination of the teacher education past demonstrates that history once occupied not only a valued position in teacher education but was, at its inception, the core of the curriculum. However, it's standing began to wane in the first quarter of the twentieth century. To bring to light this pertinent story, in this paper I outline a historical trajectory of education history's movement from a central position to a peripheral one, from the late 1800s to the present. The twentieth century also witnessed a gradual shift away from discipline-based teacher education in general. But this shift did not displace philosophy and sociology in the same way it did history. This review will help explain decisions among foundations scholars since the late 1970s to move toward more integrated foundations courses—courses that have a tendency to shortchange historical study. Why did history gradually move from a central role to a peripheral one, from a subject once believed to be axial to teacher knowledge to one viewed as nonessential? What might be the implica-

tions for such a shift? How can we better understand, and hopefully improve, current teacher education practice by being informed about the changing position of history over time?

The marginalization of educational history is of great concern because a historical perspective on education can be a critical component of a teacher's knowledge base.[1] My experience as a teacher and teacher educator has allowed me to observe firsthand the ways in which preservice and in-service teachers are limited by their lack of sufficient knowledge of the education past. While interacting with and observing many students, I have been struck by their lack of understanding of the social, economic, political, and historical features that make U.S. schooling complex and in many ways unique.

The students I work with were exposed neither to major figures nor to the study of pivotal movements that shaped the public schools as they are today. For example, they do not know that schools did not exist for all young people at the beginning of this nation's history and that school history includes stories of struggle over access for girls and certain ethnic and racial groups (Ravitch, 1974; Fass, 1989). They do not know that the public schools have always been scrutinized, since before Joseph Mayer Rice's popular 1892-1893 study in which he criticized pedagogical practice in late nineteenth century American schools; thus, *A Nation at Risk* (1984) is part of a long tradition of attacks on U.S. public schools (Rice, 1893). They do not know that the alternative school movement that solidified in the early 1980s in New York City and elsewhere is influenced by work done at the Laboratory School at the University of Chicago in the 1890s.

Historical study can contribute significantly to teachers' knowledge. First, in-depth study of history can provide an understanding of the problem-solving strategies, analytical skills, and habits of thought that historians employ. Second, historical study can foster professional identity and solidify teacher communities by providing teachers with common narratives and reference points. And third, historical study can contribute to a satisfaction of understanding that can also support a professional identity (Murrow, 2004). Thus, study of history can give teachers an improved capacity for citizenship in a society of educators, strengthening their ability to have critical perspectives on the relationships between schooling and society. Historical inquiry can support professional practice, which entails deliberation and reflection on educational problems while using multiple modes of inquiry, sometimes referred to as 'reflective practice' in the education literature (See Schon, 1983). Education history's absence threatens to limit teachers' knowledge of the social, cultural, political and economic contexts of education, leading to a narrow view of schools, teaching, and learning.

Present-day education historians including David Tyack, Diane Ravitch, and Maris Vinovskis believe the history of education is relevant to the way one makes choices in the field of education today (Tyack, 1974; Ravitch & Vinovskis, 1995). As Tyack wrote, "we need to turn facts into puzzles in order to perceive alternatives both in the past and in the present" (1974: 4). The historian Herbert Kliebard asked: "If history is supposed to guide us, how exactly does it provide such guidance?" What the study of history can provide, according to Kliebard, is not necessarily related to curriculum construction or how to run a school, but in the development of certain "habits of thought." Kliebard believed that much of the value of studying the history of education lies not in providing students with answers but in inviting them to "challenge the questions and assumptions that our intellectual forebears have bequeathed to us" (1995: 194). Kliebard's work clarifies, somewhat cautiously, what the history of education might provide teachers.

Historians interested in contemporary education policy suggest that history is an important analytical tool. "Implicit in many current writings and actions," Ravitch and Vinovskis wrote, "is the unexamined belief that knowledge of history is not necessary or particularly helpful" (1995: x). This fact is regrettable, they argue, because, in retrospect, a broader historical appreciation of previous efforts to promote change might have provided some helpful guidance for earlier reforms.

Education History: From the Center to the Periphery in Less than One Hundred Years

How history went from a position of significance in teacher education to where it is today is a long and intricate story patterned after shifting social and political forces. The history of education was among the subjects deemed important for teachers since the rise of normal school education in the first part of the nineteenth century (Clifford & Guthrie, 1988). Later, in 1881, President Stearns of the Whitewater State Normal School in Wisconsin viewed the study of history and philosophy as indispensable to a solid professional education and as an asset for all well-prepared teachers. This position, that good professional education required exposure to a liberal education, was shared by many professors and professional educators at the inception of American teacher education, and carried weight through the end of the nineteenth century (Herbst, 1989: 144).

As the nineteenth century came to a close, proponents for teacher education that included education history were numerous and Ellwood Patterson Cubberley was without question the most ardent supporter of the field (Sears & Henderson, 1957). In his work, Cubberley discussed the

value of the study of history for his students, suggesting teachers' work was by nature narrow and without historical perspective, and could easily lead to a one-sided view of education (1902). He recommended a study of the history of education as a proper corrective. Two historians described Cubberley's zeal in promoting historical understandings of education: "Here he employed the history of education much as a Marine commander might teach the history of the Marine Corps, to inspire troops with the nobility of the enterprise" (Tyack & Hansot, 1982).

Cubberley knew that historical courses were often dropped from professional education programs and this he strongly opposed. In his work, *Public Education in the United States* (1919), Cubberley made special efforts to overcome the prejudices against the subject. To this end he gave less attention to theories of education and focused instead on what he believed marked the steps in the progress toward free schools for all, a complete system of schools, the training of competent teachers, and curriculum in public education. Cubberley's history of education is laudatory, presenting the past as glorified progress to convince professional educators and students that the history of education was integral to an informed teacher knowledge base.

The presence of history within teacher education was in significant ways a matter of default (See McAninch & McAninch, 1996; Katz, 1966). The rise of the social sciences at the university and the development of fields such as psychology and sociology brought to teacher education new disciplines for the interpretation of educational problems. At the turn of the twentieth century, education-related questions were interpreted by social scientists from various disciplines and became integrated into the study of education (Roemer & Martinello, 1983). The segment of the teacher education curriculum that concentrated on contextual or foundational studies was generally organized around distinct disciplines and was taught by scholars in the separate fields. At Teachers College, Harvard University, the University of Chicago, and other non-elite university-based teacher education programs, courses in the history of education, the philosophy of education, and the psychology of education were offered as distinct areas of study at this time. In normal schools, the offerings were much the same as future teachers examined the context of schooling from the developing fields within social science.

Offering a critical perspective, Harold Rugg described this period as the "First Draft" of social foundations development (Rugg, 1952). Foundations scholars Steve Tozer and Stuart McAninch characterized the "First Draft" in teacher education:

> This instruction was suited to training teachers to take their places as preservers of the social order and was based on the work of Butler,

> Monroe, Strayer, Thorndike, and others. Instead of encouraging the future educator to be critical of civilization, foundations textbooks in these separate disciplines sought to instill—or at least did not question—conformity to conservative social and political norms. (Tozer & McAninch, 1987: 13-33)

Hence, the "First Draft," according to Rugg (and as interpreted by Tozer and McAninch above), represented a period of conformity and conservatism.

The period Rugg called the "First Draft" overlapped with the rise of social efficiency in education and in American life, an ideology that profoundly altered teacher education including the placement of history therein, and the foundations fields in general. One scholar described this approach to human problem solving as "a science of exact measurement and precise standards in the interest of maintaining a predictable and orderly world" (Kleibard, 1986: 78). The ways in which social efficiency retailored teacher education were far-reaching, affecting instructional techniques, curriculum construction, personnel policies, and building management. The work of the educational reformer John Franklin Bobbit is a case in point. In his 1913 book on city schools' supervision, Bobbit promoted uniformed and regimented methods of instruction with the aim that teachers would achieve standard results (1913: 95-96).

Perhaps no single factor was as responsible for education history's eclipse as was the rise of science and its implications for education. According to Ellen Condliffe Lagemann,

> there was scant demand for theory and high demand for practical techniques that might yield new "efficiencies" in the delivery of instruction as well as the general management of the school system. Responding to this, scholars of education sought to develop more professionally useful versions of traditional fields of scholarship and adapted techniques from social and psychological research for their use in schools. (Lagemann, 2000, 73)

Psychology and sociology were readily adaptable to efficiency models but the social sciences with "ambiguous virtues" and most associated with the humanities—notably history and philosophy—were trumped by what were believed to be more measurable and pragmatic pursuits (Tholfsen, 1977). In 1887, William H. Payne of the University of Michigan, a strong proponent of education history, argued that history "should be made the counterpart and proof of the science of education" (Payne, 1887: 131). However, over the next three decades, an enthusiastic search for an exact science of education defined teacher education and social science disciplines other than history gained new relevance and prestige.

In the 1930s at Teachers College, a course was developed that challenged previous conceptions of single-discipline courses and sought

to bring renewed distinction to the history of education and the other educational foundations (Butts, 1993). Presenting educational problems through multiple lenses, the Foundations of Education I and II brought together in one syllabus the major social science disciplines (Cremin et al., 1954: 151). Because its founders were members of the Social Frontier group and believed teachers had the capacity to serve as agents of social change, social reconstructionism informed the curriculum. The two-semester foundations course, described by Lawrence Cremin, David Shannon, and Mary Towsend in their history of the College, incorporated topics that ranged from nationalism, technology, and cultural determinism in the first semester, to learning, religion, and vocation in the second.

> In the small discussion groups comprising a regular portion of each class session, students had worked together on a host of social, political, economic, and personal issues formerly considered alien to the educator's scope—or even vision. In the process, the whole conception of the educator's task had undergone an immeasurable broadening. (Cremin, et al., 1952: 152)

Harold Rugg called this period the 'Second Draft,' when scholars developed a more critical social orientation and included interdisciplinary approaches (Tozer & McAninch, 1987: 14). Although the Teachers College course was not replicated at most schools of education, foundations scholars today cite Foundations I and II as a model which influenced their work (Tozer & McAninch, 1986; Tozer, 1993).

Though deeply influential during its run and for years afterward (and continuing up to the present), the Teachers College integrated foundations course was replaced in the 1960s by discipline-based studies. R. Freeman Butts, one of the original members of the Teachers College foundations group, explained that in the 1960s, the departmental majority at Teachers College was to stress "the scholarly disciplines rather than the professional actions, research rather than service, and training the specialist" in the separate foundations fields (Butts, 1993: 23). Indicating this redirection, in 1964 the name of the Department was changed from the Social and Philosophical Foundations to Philosophy and the Social Sciences. Apparently, students were allowed to take more specialized courses in Division I as early as 1946-1947 (Cremin et al., 1954: 217). Soon this shift became a trend in professional programs across the country with single-discipline courses being offered at most institutions.

Proponents of Integrated Foundations Courses Since the 1950s

During and directly after the Teachers College two-semester course was phased out, attacks on teacher education gained momentum nation-

wide and foundations scholars received their fair share. Education professors acknowledged professional education was in trouble and understood the need to respond thoughtfully and deliberately to criticisms wielded by their detractors (Bestor, 1953; Conant, 1963; and Koerner, 1963). Later in the 1970s and 1980s, foundations scholars proposed changes in the way teacher education was conceived. For example, professors at Teachers College, Stanford University, the University of Vermont, and Kent State University, who generally offered single-discipline courses from the late 1950s onward, began to show a new (and for some a renewed) preference for the integration of the foundations into single, interdisciplinary courses of study (Valli, 1992). This turn corresponded with cries from the field to make teacher education subjects more germane to teachers' experience (See Sarason et al., 1986). Among other things, these attempts aimed to bring the foundations back to a notable position in teacher education programs nationwide.

The 1980s proved ripe for interdisciplinary courses and education professors including Lee Shulman at Stanford and Jonas Soltis at Teachers College developed their own versions of integrated foundational study (Shulman, 1990; Soltis, 1990). Shulman and Soltis sought to resolve the problem of relevance that had plagued the field through the development of their respective integrated foundations courses. Articles portraying concerned and responsive foundations professorate were published in professional journals relevant to the social and psychological foundations as well as in more broadly based journals such as the *Harvard Educational Review* and the *Teachers College Record*.

For instance, Robert J. Nash, David A. Shiman, and David R. Conrad wondered about the very survival of the foundations in their 1977 article: "Can the Foundations of Education Survive? Grappling with Our Death Wish." Nash, Shiman, and Conrad expressed alarm stating "the foundations of education long the academic staple of teacher preparation, were in serious trouble" (1977: 4). The authors concluded with seven proposals toward a new conception of foundational study including a down-to-earth approach to the field rather than an esoteric one, and a call to bring social critique and bold policy formulation to the foundations of education.

The complete 1982 May-June issue of the *Journal of Teacher Education* examined the foundation's marginality and most authors concluded that a new role for the field was required. Nash and Russell M. Agne argued foundational deficiencies actually mirror the intellectual weakness of teacher education as a whole (1982: 2), claiming that, without foundations courses, "professional development deteriorates into a vapid training devoid of purpose, soul, or theoretical rigor" (1982: 5). Rather than a strict disciplinary proposal, Nash and Agne called for a question and problems-

based approach. In the same issue, Norman R. Berier and Averil E. McClelland also supported an integrated model of foundations study (1992).

Since the early 1980s, Steven Tozer of the University of Illinois has made substantial contributions to scholarly discussion about the content, role, and status of the social foundations in teacher education. Tozer's 1993 article, "Toward a new Consensus among Social Foundations Educators" elicited numerous replies published in the same Educational Foundations issue. Scholars including Eric Bredo, Averil McClelland, Jeffrey Roth, Alan H. Jones, Donald Warren, and Butts sought to re-conceive the social foundations, their work serving as wake-up calls (1993). But those concerned with the position and status of education history in teacher education will not find consolation in the reform proposals that emerged since the 1940s. Education history has been shortchanged in foundations reforms whatever they have been.

Current Teacher Education: Two Co-existing Models

The history of educational foundations demonstrates that a new approach to the way the foundations were presented to teachers became necessary. But evident from the historical trajectory outlined above, the question of *how* to present foundations of education content to teachers has generally centered on a choice between integrated foundations (social foundations courses) or single discipline courses (history, psychology, philosophy or sociology). The history of the social foundations in teacher education from the 1940s onward contains two coexisting models, reflecting aspects of Rugg's "First Draft" and "Second Draft" analysis, sometimes within the same institutions. For example, professional organizations such as the American Educational Studies Association (founded in 1968) foster integrated approaches to the foundations. Scholars, including H. Thomas James, proposed that the foundations be less readily identified with disciplines, but should intersect with sociology, political science, and economics (1982: 92). At the same time, many members of the History of Education Society and the Philosophy of Education Society identify with scholars in the arts and sciences over their foundations colleagues, preferring a single discipline approach.

Research shows that most foundations requirements in teacher education today have been kept alive solely as a result of state certification mandates and if it were not for these requirements such courses might be marginalized further (Nash & Agne, 1982; Warren, 1982). Based on findings from a 1981 survey, Christopher J. Lucas observed that foundations studies are often relegated to a peripheral or ceremonial

role; they are not in any meaningful sense positioned so that they are foundational to other elements in state-approved teacher preparatory programs (Lucas, 1980; Lucas & Cockriel, 1981). Almost twenty-five years later, comparable investigations would most certainly reap similar results. At Teachers College Columbia University, New York University, and Long Island University, Brooklyn, institutions where I have studied and/or worked, students are required to take no more than two foundations courses. Often such courses are resented by students as irrelevant to their work in classrooms, criticized by other education faculty as "soft" or non-specialized (the integrated courses especially), frequently taught by adjuncts, and otherwise marginalized.

Generally, today's students of education are not required to take courses in the single disciplines as part of their degree programs, and the majority graduate with only two classes in the foundations overall. One unfortunate result is that a surprising number of pre-service and in-service teachers complete teacher education programs without any exposure to education history.

What Now? History across the Teacher Education Curriculum

The trajectory of the changing role of education history in teacher education outlined in this paper demonstrates how education history became perceived over time as peripheral to teachers' practice and concerns. Among other factors, this perspective may have emerged from the way history has been situated in the teacher education curriculum. When offered as a distinct history course, some administrators, faculty, and policymakers warn there are limited credit hours available for study not considered directly relevant to teaching. When placed in an integrated foundations course, history is often viewed as extraneous, while sociology, philosophy and psychology take center stage (Murrow & McCarthy, 2004). One can argue that history *is* intrinsically linked to sociology, philosophy and psychology and therefore cannot be left out of such exploration. This may be precisely where history has its relevance, giving background and perspective to *all* education related questions including the sociological, philosophical, psychological and ultimately, pedagogical.

Because history offers relevant perspective to *all* education-related problems, it must be included *across* the teacher education curriculum, integrated within courses that address curriculum, pedagogy, and the foundations. One might suspect that this would be an impossible task. However, if teacher education faculty commit themselves to providing

experiences that aim to develop historical perspective in all teachers, it can be accomplished in a number of ways.

History across the Curriculum: The Presentation of History in Teacher Education

The report of the National Society of College Teachers of Education's Committee on Historical Foundations, published in 1956, provided an important analysis for the role of the history of education in the preparation of educators, and put forth strong recommendations that center on its presentation to teachers in training (Chiappetta, 1956). *How* education history is taught, according to education luminaries such as Lawrence Cremin and E. Freeman Butts, matters in the way students perceive the subject. The way courses are constructed, alongside how pedagogy in such courses is enacted, is significant to whether or not students can experience historical knowledge informing their overall decision-making, including their teaching practice.

In the context of Rugg's analysis of the trajectory of the social foundations, the integration of education history across the curriculum can be considered another draft in teacher education. What might this approach to curriculum and teaching look like? First and foremost, education faculty should provide historical perspective when teaching any and all teacher education topics. If the subject at hand is curriculum, students should be exposed to the complex and often contentious history of school curriculum. If the subject at hand is pedagogy, students should be exposed to how approaches to pedagogy have changed (or have changed very little) in schools over time (Cuban, 1984). If the subject at hand is child development, students should be exposed to the shifting views of children throughout U.S. history, and how such understandings shaped the way teachers worked with their pupils.

The pedagogy relevant to teaching history so that it matters to teachers is an understudied area. However, in my own work with education students, use of primary source documents, for example, have proven effective in their support of learning that is hands-on and centered on the posing of questions and problems that are generated by students themselves.[2] When students are presented with historical materials for review and discussion, inevitably they raise questions that link the source to current circumstances in ways that are relevant to them (Murrow, 2005).

Of course, there are appropriate criticisms of a proposal to incorporate history across teacher education. Asking non-history faculty to incorporate historical information into their courses could lead to poorly taught and inaccurate education history in teacher education. This is a

very serious concern. Moreover, if history is presented only in non-foundations courses it could be spotty and thus insufficient in providing far-reaching perspectives on the development of schools and schooling in the United States and elsewhere. In some cases, the selection of pertinent readings can be sufficient in adding historical information to courses. But ultimately, students should be required to take *balanced* integrated foundations courses that present education history along with other foundations perspectives, and in the context of a teacher education that includes the historical perspective across the entire curriculum.

Meaningful collaboration is central to this work. A more extensive and deliberate study of historical questions can exist if education faculty collaborates with one another, including those in the foundations along with those in curriculum, pedagogy, and other areas. There are numerous ways such collaborations can benefit students, from team teaching offerings to mini-seminars within courses that aim to highlight the history of the subject under investigation.

Conclusion

While the basic content of the history of education is vitally important to what role history will play in teacher education in the future, *how history is presented* to future teachers at the college and university is equally significant. In many ways the emergence of integrated foundations courses in the 1940s was a strong acknowledgement that presentation mattered. For example, textbooks from Teachers College (1941) and the University of Illinois (1956) included questions encouraging students to think deeply and critically about education problems in the United States, and from multiple perspectives (Anderson et al, 1956; Rugg et al, 1941).

Of course, textbooks and other readings play an important role in *how* history is taught to teachers and serious consideration should be given to the way in which history is presented in single-discipline as well as in social foundations of education texts (See Murrow & McCarthy, 2004). But in order to bring history to students of education so that knowledge of the past can be truly advantageous to their thinking about education, areas of study that have traditionally been viewed as separate, including history and current issues, curriculum, and pedagogy, should be studied in conjunction with one another. Students should be given opportunities to engage in historical inquiry around multiple topics in education, and to this end, education faculty must work toward developing meaningful collaborations while creating curriculum, having the opportunity to present more relevant courses to their students.

History was a respected component of teacher education at its

inception, but valuing historical perspective should not be considered dated. Providing a critical mode of inquiry that can support a sharpened understanding of teaching, learning and schooling, history along with other foundations fields has a conspicuous role today. With the help of historians of education along with those more closely associated with the 'practical' aspects of teacher preparation, curricula can integrate the content of teacher education, modes of inquiry necessary to the teacher knowledge base (including historical inquiry), pedagogical aims, and professional practice. The question of "Why study educational history?" or "What is the relevance of history?" will no longer plague teacher education once students start to grasp history in new ways, with opportunities to bring together historical knowledge and practice, theory and real life.

Notes

[1] Throughout this paper, "knowledge base" refers to the myriad modes of inquiry that are necessary to effective teaching practice including pedagogical, philosophical, psychological, and historical and not limited to content knowledge to be taught to students in grades K-12.

[2] A paper based on a curriculum I tested that supports the use of historical documents across teacher education was published in *Educational Studies* (2005). See "Learning from Recurring Debates in Education: Teacher Education Students Explore Historical Case Studies," *Educational Studies*, *37*, 2: 135-156.

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Probability, Decision Theory, and a Curricular Approach to Developing Good Thinking

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Introduction

Education is most assuredly a social phenomenon. But it is what happens to individuals that makes education what it is. The development and betterment of the individual is the proper focus of educational (as opposed to schooling or socialization) purpose. Unfortunately, all too often, in an effort to make educational studies look like those in the sciences, empirical measurements are beginning to obscure focus on the purpose of education. Preoccupation with methodological rigor has focused attention on those things most measurable, namely things such as memorization and context-based skills. Attitudes such as a passion for truth in the pursuit of learning, dispositions to initiate and follow-up on a line of inquiry fall evermore by the wayside.

Education is not itself a strictly natural process amenable to empirical investigation as are things like phenotypic variance or learning. Among other things education is about what *ought* to be learned and how it should be respectfully shared within a community of truth-seekers. Respect is a moral notion not easily identified or measured through operational definitions and empirical strategies. Truth-seekers are those who are passionately and morally committed to the idea that what they learn "maps onto" the world in some reliable fashion. Indeed, falsehoods can often be learned as easily as truths.

Education, as opposed to just any kind of learning, focuses people's attention on identifying and sharing truth or the closest approximations

thereof. Consequently, those responsible for education are leaders in a moral venture namely, the moral venture of helping others become better as a result of specific developments of mind. Indeed and more generally, leadership itself is moral architecture and should be recognized as such.

Leadership in education identifies for all participants what betterments should count as success. Empirical studies of learning are value-free and thus cannot fulfill the educational leader's need to identify attitudes, skills and subject matter that should be reflected in the shared mental world of those who are properly said to be educated. To determine what should be valued in education a good place to start for leaders, scholars and even students is the biographies and autobiographies of those generally recognized as educated. The autobiographies of John Stuart Mill and Benjamin Franklin are of legendary fame in American classrooms, but there are many other stories equally as relevant and more appealing to some. For example, two individuals from whom much can be learned are Thomas Bayes and Blaise Pascal. Not only were each of these individuals recognized as well educated by nearly any standard imaginable, but each was fascinated with identifying tools enabling truth-seekers to parse truth and separate it out from so much else that is errant suspicion. Neither isolated one type of truth from another by acquiescing in excessive specialization. Each allowed his mind to roam as his interests prompted him. Each of these individuals was recognized (and still is) as a paradigm of being educated. Consequently, it is instructive to note that their interests and thinking practices stand in stark contrast to interests and thinking practices fostered in a world of teacher accountability and "No Child Left Behind" standardized testing.

Integrative Learning

In the current era of excessive standardized testing, schools no longer even give lip service to the need for integrated curriculums to develop higher level thinking skills or interdisciplinary learning. The consequence, as a recent special on CNN (High Stakes Testing, May 7, 2005), shows has been a rise in test scores for "No Child Left Behind" programs while there is no parallel rise in either the ACT or SAT scores. When all is said and done, it is children who lose out when teachers become ever more narrowly focused on subject-specific minimums. When teachers are no longer rewarded for curricular initiatives that "reach for the stars," children's aspirations similarly diminish and their quest for the excellence of self-fulfillment falls by the wayside.

The episode of intellectual history that follows shows three things. First, it shows educators and students alike that the search for truth

involves acquiring rigorous methodologies for distinguishing truth from mere suspicion or things others simply declare as truth. Bayes and Pascal sought ways for better decision making in contexts where certain knowledge was beyond reach. Second, not only were Bayes and Pascal liberally educated their story provides teachers with that "teachable moment" for showing advanced high school students that interests in history, science, probability and critical thinking are naturally interwined in the minds of the most educated. Third, students, and hopefully, educational leaders should learn from these stories that knowing "stuff" within the confines of knowledge silos and which is most amenable to standardized testing has little to do with how real thinkers are naturally led to push back the frontiers of knowledge. And, since education should be about developing the dispositions and skills of masterful thinkers rather than test masters, it is time to re-think many recent trends in educational practice.

No Truth? Then What Good Is Probabilistic Thinking?

The eighteenth century was a time when there was extraordinary enthusiasm for human ability to learn most any truth. The inhibiting influence of dogmatic and domineering churchmen (not wholly unlike many of today's educational policy-makers) was giving way to new dogmatisms of the Enlightenment. However, there was as well a dawning appreciation for what twentieth century psychologists and decision-theorists would later call judgment-under-uncertainty.[1] Truth was proving to be suspiciously more elusive than expected and so additional tools for identifying at least approximations of it were in high demand. And of course today, more than ever before, the practice of making judgments under conditions of uncertainty remain a focus of intense research.[2]

Probability theory's value as a mathematical tool in decision-making, and especially in games of chance, dates back at least to the First Dynasty in Egypt (c.3500 B.C.).[3] Mathematical tools of probability for arriving at decisions in commercial and insurance ventures can be traced to the Italian renaissance and the work of Fra Luca Paciola (1445-1517), Celio Calcagnini (1479-1541), and Tartaglis (150-1597).[4] But it wasn't until the 17th century that something akin to a mathematical theory of probability for decision-making and the quest for approximate truth began to emerge in the published works of Christiaan Huygens and the correspondence between Pierre de Fermat and Blaise Pascal.[5] The eighteenth century saw the flowering of the classical theory of probability theory, beginning with Jakob Bernoulli's *Ars Conjectandi*, published in 1713, and augmented by a wealth of works by his brother Johann and nephews Nikolaus and Daniel. Moreover, Pierre-Remond de Montmort, Abraham De Moivre, Leonhard

Euler, Joseph Lagrange, Thomas Bayes, Pierre Simon de La Place, and Jean d'Alembert each made substantial and unparalleled contributions to the growing literature of probability as a field of applied mathematics.[6] Among these champions of probability, only the cleric and amateur mathematician, Bayes saw the collective works of his peers in probability studies as contributing to epistemology and decision making.

Not until the end of the nineteenth century did the mathematical theory of probability lurch forward again as stunningly as it had during the mid-eighteenth century. By the end of the nineteenth century, fascination with probability had catapulted beyond mere pragmatic concerns with matters of gaming, insurance and business risk and ventured into scientific investigation of genes, gases, and nature more generally. With the dawn of the twentieth century, probabilistic epistemology became a way of thinking in matters of scientific *justification*. This shift in applied probability theory led to the discipline we now call statistics. Obsession in the sixteenth century with the austere world of classical probability rapidly gave way in the nineteenth century to frequency theory. The success of frequency theory in Helmholtz's study of gases and Mendel's and Galton's study of inheritance, was so spectacular that frequency theory still remains the epistemological foundation of most statistical theory even to this day.[7] Not until the twentieth century would the so-called subjectivist theories attributed to the intellectual heirs of Thomas Bayes become a serious competitor for the minds of statisticians.[8]

While philosophers of science interpret this development from classical to frequentist thinking as reflecting the evident success of new statistically based scientific enterprises such as electrodynamics and thermodynamics, postmodern sociologists of science are more likely to describe the emergence of frequency theories as nothing more than a simple shift in conceptual fashion, given the developing interests of scientists at the time.[9]

By the twentieth century, statistical analysis and the mathematics of probability were fully accepted as epistemic instruments of the first order and no longer as rough barometers of the world's ontology. Nevertheless, while frequency theory extended the successful reach of scientific thinking, there was still a need for probabilistic rigor in practical decision-making that seemed lacking. The epistemic range of probabilistic thinking had been first noticed by the scientist, Blaise Pascal and later developed by Reverend Thomas Bayes. It was then subsequently ignored until the twentieth century. Admittedly, Jacob Bernoulli and Pierre LaPlace employed Bayes' mathematics, but they failed to see the epistemic potency of such reasoning.[10] Not until W. S. Jevons did any hint of Bayes' epistemic promise become evident.[11] For his part, Pascal showed that, even when

knowledge is necessarily incomplete, there are plausible methods for strengthening epistemic decisions in the direction of "the best bet" possible. And later, as alluded to above, Thomas Bayes showed the utility of aggregating not merely numerical accounts of data but rather quantitatively justified levels of confidence to ensure optimally prudent decisions when mathematically determinate inferential procedures are inapplicable.

Pascal

Since Pascal's story is likely to be more familiar to the reader, I will address and dispose of his contribution in relatively short order. As has already been mentioned, the Fermat/Pascal correspondence is typically cited, along with the work of Christaan Huygens, as the beginning point of formal probability theory.[12] Pascal had no sense that he and the others were on the verge of establishing a new intellectual field marrying applied mathematics with epistemology. By nature, Pascal was an epistemologist of the first order. As an accomplished scientist he wanted truth and nothing less. He set out to extort from nature every observation that might even hint at some truth. Pascal saw mathematics and techniques of measurement as simply tools utilized for some higher end namely, the search for truth. Pascal's search for truth was very general and far ranging as is appropriate in any genuine pursuit of truth. For example, Pascal as a lay psychologist inquired into the nature of *the* good life. His first stab at figuring out the content of the good life was very practical and led him to exploit his fame and celebrity as a scientist to hobnob with nobles, solicit the attention of beautiful, young women, and party into the wee hours of the morning. This search for the good life changed directions suddenly for Pascal when he was only twenty-six. Late one night he experienced a tormented "dark night of the soul" (to echo the oft used words at the time by mystical writer, St. John of the Cross). Most probably Pascal suffered a panic attack. Like the more familiar tale of mathematician, John Nash, Pascal, like number theorist Georg Cantor and artificial intelligence researchers Alan Turing and Norbert Weiner suffered severe mental problems while still producing technical works of sheer brilliance.[13] This is not infrequently the case in the history of human brilliance. The searching mind knows few limits when searching truth of self and the world. For some this exhausting search becomes overwhelming. In any case, subsequent to that night of conversion Pascal became a strict moralist of Jansenist persuasion.

Pascal believed he had learned both through experience and through revelation, that truth of all sorts is often not straightforwardly evident. He came to understand that human reasoning, even at its best, could lead

to nothing more than the "best bet" at truth. He concluded too that in the most important aspects of life, the grandest of all truths might be accessible only through religious revelation. Keep in mind, he was at this time of religious "awakening" in his twenties and already emerging as Europe's greatest scientist.[14] By the end of the night, Pascal jotted down seven words settling for him the meaning of life. He never discussed the details of this experience, but he had the paper with the seven words sewn into his robe so he would never be without them. The words are not worth citing here, since from an outsider's perspective they at best seem to reflect nothing more than something of a personalized verbal Rorshach for Pascal. The point to be gleaned for the purposes of this paper is that Pascal believed that in addition to scientific truths there are truths than can never be determined in a mathematically rigorous way but yet are nevertheless important to grasp as best one can.[15] This conclusion led Pascal to the beginning of decision theory and his famous example of the wager.

Pascal's Wager

Pascal suggested that under conditions of existential uncertainty, the most effective heuristical device for deciding whether or not to live a godly and righteous life is to consider the practice of wagering. A bet (such as an insurance contract) is rational only if the benefit sought is proportionate to the costs and risks incurred as a result of undertaking the bet.[16] For example, when considering how to live one's life in case there is a god prepared to reward a certain lifestyle with untold benefit, the decision should not be left to mere whimsy. If a gambler admits *any* possibility that a god will grant an eternity of infinite goodness to one living as a Jansenist, then there is no other reasonable conclusion for a self-interested gambler than to live as a Jansenist. (No matter how small the chance such a god exists, say, .000001. Any affirmative possibility multiplied by infinite reward leads to an infinite value. The cost of the giving up a life of wine, women and song for an infinite reward pales by comparison. Consequently, the only rational choice is to gamble on the power and beneficence of a Jansenist-styled benefactor! (The fly in the ointment is that the same rationale works for any religious position just so long as there is a promise of infinite reward at the end of the rainbow, so how can one know which prescribed life to adopt?)

Today, Pascal's wager is credited with inaugurating decision theory or as the psychologists call it, decision-making under conditions of uncertainty.[17] Prior to Pascal's time, natural arrangements not depicted by determinate equations and subject to data spread and fluctuation were regarded as either products of the miraculous or the consequence of

human sensory limitation. Pascal's wager initiated a procedure for using mathematical analysis to evaluate the cost and residual value of a decision to act when relevant information is necessarily incomplete. The applicability of such procedures has become increasingly commonplace in both business and policy studies in the latter half of the twentieth century. And, even in physics, statistical fluctuations as seen in the theory of gases developed by Clausus, Maxwell and Boltzman are now modeled by a mix of Newton's calculus and objective probability rendering relatively evident the behavior of all gaseous material.[18] While Pascal's wager focused on how to bet one's life, the same principles apply when choosing between competing but ontologically distinct models or theories with comparable rates of predictive success.[19] Scientists and scholars appreciate the generality of such principles only to the extent they are free of the knowledge silos confining the learning of students today.

From Decision Technique to Epistemic Evaluation

Initially, the force of Pascal's wager was ridiculed as nothing more than some sort of Christian apologetics. Yet, barely a half-century later, in a display of unbridled epistemic machismo, Protestant man of the cloth, Thomas Bayes, again showed that applied probability illuminated reason for degrees of epistemic certainty. In an essay that attracted little attention at the time, "An Essay Towards Solving a Problem in the Doctrine of Chances" (1764),[20] Thomas Bayes single handedly destroyed the epistemic foundations of applied mathematicians, utilizing classical, also called today "objective," probability theory. What Pascal only suspected, Bayes made explicit.[21] Bayes decided that figuring something out in a world short on evidence is as much a matter of psychology as it is mathematics. Coming to know something as well as the evidence permits reflected for Bayes a level of confidence and not an endorsement of alleged fact. In this light, Bayes developed a mathematically vigorous heuristic showing how to most reasonably weight the drift of the evidence in order to make the "best" decision possible reflecting all relatively predictive evidence at hand.

As noted above, Bayes, like Pascal before him, found little receptiveness to his writing during his lifetime. But just as Pascal's name was later memorialized in the twentieth century as the "father of decision theory,"[22] Bayes' name too, became memorialized as the "father of subjectivist probability theory."[23]

Today it's quite fashionable to declare oneself a Bayesian (a subjectivist or a personalist) in matters of statistical analysis. But in the eighteenth century, Bayes' equation and accompanying recommendations were either too foreign to the metaphysical commitments of the scientific

community to be tolerated or too subtle to be noticed. Moreover, there were so few truly bothersome anomalies in any one sector of scientific research to create sufficient agitation for a methodological paradigm shift in the probabilistic analysis of a given body of data. At the time Bayes was truly a voice crying out in a wilderness of intellectual arrogance.

Before faulting Bayes' contemporaries too harshly for not recognizing the epistemic potency of his methodology, it is important to recognize that in the seventeenth century, advances in science were often married to similar advances in mathematics. The advance of science was so impressive there was no apparent need for considering other mathematical approaches reflecting distinctly different philosophical commitments as were so worrisome to Bayes. For example, as every college graduate knows, the Copernican revolution mathematically interpreted data that re-wrote all previous cosmological theory and did so with the underpinning of a deterministic metaphysic. Similarly, Galileo's reliance on mathematically interpreted experimental data illustrated the potency of the new experimental science. Francis Bacon subsequently articulated Galileo's approach in a new philosophy of science and epistemology. A little later, Newton's mathematized laws of motion revolutionized thinking about the physical world in a manner unequaled before or since, with the possible exception of Einstein. And finally, Leibniz's theory of fluctions and Newton's calculus created mathematical apparatus as important to science as Galileo's reliance on experimentation and the mathematical aggregation of measured observation.[24] There was every reason to flaunt the Olympian achievements of the new scientific mind at the time, and no pressing reason to conceive of novel approaches to either probability or its application.[25] In every way it seemed, Nature was giving up her truths. Promise had given way to unmitigated (and as Bayes worried, unreasonable) confidence and unsubstantiated confidence would lead to conceptually stifling arrogance. Scientists of the period believed nature had a book of recipes and they were learning how to read it.

Unlike his predecessor of the sixteenth century, Pascal, Bayes had no credible scientific work under his belt as either a scientist or a mathematician as had for example, his contemporary in the development of objective, probability theory, De Moivre.[26] Bayes, the amateur was easy to ignore so, it is no surprise that it took over 200 years for the Reverend Bayes' work to become fully appreciated.

Bayes' Theorem and the Epistemic Status of Competing Propositions

Bayes' groundbreaking work was couched in an extraordinarily

subtle presentation. For example, he begins his "Essay 5" by enumerating seven propositions that were (and still are) regarded as uncontroversial axioms of classical probability theory. From these seven definitions (see Appendix B), Bayes derives formulas relating to the chance setup of a perfectly level billiard table. So far so good and, so unexceptional! But then Bayes adds a scholium in which he attempts to take the formulas derived from the previous axioms and in light of the chance setup of a perfectly level billiard table to show how the derived formulas solve his initial problem of billiard ball displacement. Note how Bayes blends here the technical with the commonplace. Surely a "knowledge-silo" mind could have never been so imaginative! Bayes completes the essay by enumerating the famous ninth proposition and prescribes rules, followed by a technical appendix showing how his solution can *be generalized to other real world examples*. Specialists thought Bayes was vexed by the same sort of problems vexing other statisticians. And indeed Bayes' billiard table example and the others he discusses were common fodder for probabilistic analysis. But Bayes' work belied a deeper, more philosophical concern with the foundation of probabilistic reasoning in general.

Subtlety is not appreciated by the unprepared or narrowly circumscribed mind so it is not surprising specialists didn't recognize the power of what this unknown amateur was proposing. But, Bayes knew he was on to something significant. His stated objective from the beginning was to assault what we now call objectivist probability theory. Whereas other theorists of the day were exacting the probabilities for any given chance setup in principle, that is to say, the throw of a fair die, the flip of an evenly balanced coin, the evident wobble of perfect celestial bodies and so on, Bayes was concerned with the problem of inverse inference. That is to say, rather then creating mathematics that would allow us to infer the workings of ideal systems, Bayes proposed looking at the world first, creating a reasoned account of all that could be seen, and then adjusting one's mathematical justification for a proposed model or theory in light of anomalies and the ongoing accumulation of evidence. In short, Bayes was contriving a bootstrap approach to the best explanation of nature's inner workings.[27]

In contrast to Bayes' approach, traditional probability theorists such as the Bernoullis, set out to calculate objective probabilities that arose in the course of a limited number of uncontaminated trials. (This also took the form of trying to calculate the repetitions necessary for securing the likelihood of a specified outcome.) By contrast, Bayes wanted to determine the probability that a given chance setup would lead to results replicable in future setups of an indistinguishable kind. In its simplest form, Bayes' rule (for the case of two hypotheses) states that, when we are

trying to discover which of two mutually exclusive and exhaustive hypotheses (H, ~H) are true, we perform an experiment and/or otherwise gather evidence. Consider a proposition stating an evidentiary claim, E. Since E is in fact an evidentiary claim, E must have some probability value greater than zero. We will represent this as follows: $Pr(E) > 0$. In classical probability, the definition of conditional probability is as follows:

$$\text{If } Pr(B) > 0, \text{ then } Pr(A/B) = \frac{Pr(A \text{ and } B)}{Pr(B)}$$

From this it follows that:

$$\text{If } 0 < Pr(B) < 1, Pr(A) = Pr(B)\, Pr(A/B) + Pr(\sim B)\, Pr\, A/\sim B)$$

In a situation where A and B are hypotheses which are mutually exclusive and exhaustive, they can be represented as H and ~H. (See Appendix B for Bayes' seven definitions that determine the inevitability of the calculation below) Recalling that E is a statement of some evidentiary support Bayes rule proposes:[28]

$$Pr(H/E) = \frac{Pr(H)\, Pr(E/H)}{Pr(H)\, Pr(E/H) + Pr(\sim H)\, Pr(E/\sim H)}$$

In this way, Bayes is able to exploit a mathematical law that utilizes the inversion of a probability. This formalizes the notion so common in philosophy of science and Bayesian probability theory today of bootstrapping to the best explanation. That is to say, by relating the probability of A given B to the probability of B given A, the investigator is able to learn from experience as it were, in order to narrow in on the best explanation. Bayes' rule does this narrowing in via the standard multiplication principle of conjunction whereby one can determine the probability of the *conjunction* of two outcomes algebraically. Bayes' rule as formulated above is for use with only two mutually exclusive and exhaustive hypotheses. Contemporary Bayesians have ventured forth bootstrapping methods by loosening one or the other conditions of exhaustiveness or exclusion. It is tempting at first glance to think of Bayes' work, especially as it evolved in the early part of the twentieth century, as nothing more than a supplement to Bernoulli's Limit Theorem (known colloquially as the law of large numbers, see Appendix A). As a supplement to Bernoulli's Theorem, Bayes work looks like nothing more than a contribution to objective probability theory. But, this assessment of Bayes falls far wide of Bayes' intended mark. In objective probability theory, the quest is to determine supremely rational fixed chance ratios. These ratios were long believed to be independent of any epistemic considerations. They were regarded as real world propensities varying naturally within limited frequencies.

Bayes' understanding of the connection between rationality and the arrangement of nature's furniture was distinctly more subtle than that of the scientific realists of his day. Bayes recognized that rationality could never exactly mirror nature's laws or the distribution of her goods. Echoing Pascal, Bayes realized that in certain undertakings, rationality consisted in no more than making the best possible bet in light of available evidence. What Bayes showed was how to exploit the addition of further evidence to re-conditionalize one's wagers reflecting the effect of limiting intervals suggested by new evidence. By approaching applied probability theory in terms of betting quotients, Bayes showed that the search for truth could not simply be a matter reading off a litany of nature's secrets. Rather, even with the best available tools of mathematical analysis, truth can be attained only within intervals of reasoned confidence.

This merging of the psychological and the mathematical was stunning. Bayes' revolutionary approach to epistemology is singularly insightful. It's stature in epistemology and applied probability is akin to that of the three great revolutions in physics namely that of Copernicus, Einstein and quantum theory or Darwinian theory in biology and paleontology. And, just as each of those revolutions continues in one fashion or another, so too the Bayesian revolution continues through efforts by Karl Pearson and Ronald Fisher and subsequent technical development by Bruno de Finetti and Leonard Savage.[29] Today, as probability theorist, I. J. Good, has observed, there are Bayesians everywhere and even more versions of Bayesianism.[30] What had once been regarded as the fanciful imaginings of a rank amateur, Bayesianism now sets the agenda for critical thinking, decision making and theory construction generally in the twenty-first century. In seeking passionately for truth and by emphasizing the role of betting quotients, Bayes illustrated that when approaching conclusions under conditions of uncertainty, the best one can hope for is a bootstrapping technique for making decisions at the time.

That Bayes' work extends well beyond mere tinkering with probability theory may not yet be clear to the reader. A brief reflection on how Richard Price, a contemporary of Bayes and his first commentator, used Bayes' work shows its more general application. Bayes was well acquainted with David Hume's work on induction. In Price's *Four Dissertations* (1767), he relied on Bayes' work to thwart Hume's antagonism to the miraculous in "On Miracles."[31] Price was steadfastly convinced by Bayes' work that Hume's deterministic empiricism failed to illuminate the shortcomings of epistemic practice in principle. When shown Price's work, Hume is reported to have responded that, "I own to you, that the Light, in which you have put this Controversy, is new and plausible and ingenious, and perhaps solid. But I must have more time to weigh it,

before I can pronounce this Judgment with Satisfaction to myself." In the end, Hume never did respond. Perhaps Hume realized that any serious admission on his part that Bayes may be right in his epistemic method would cause others to disparage both Hume's own solution to the problem of induction, his empiricist ontology and even his dismissal of the possibility of miracles as well. For Hume, nature (at the macro level) etched things on to the human mind through experience in nearly isomorphic fashion. In contrast for Bayes, humans could learn by deliberately prompting nature and then adjusting epistemic rendering of the conclusions that seem to follow from an aggregation of subsequent data. Price's recognition that Bayes' work had as much to do with the epistemic foundations of induction generally as it did with technical development in applied probability theory was the first recognition that the fortunes of applied probability and epistemology would forevermore be bound together.

In an ideal Bayesian world, all the most reasonable people will converge on the same betting odds in a given situation. However, this convergence alone will never wholly secure accurate apprehension of a law of nature.

In the wake of Bayes, no one can ever again confuse the supremely rational with the epistemically certain. Indeed, Bayes influence is so pervasive today that even the term "objective probability" is regarded as the same sort of abstract and ideal artifact in statistics as "spin" or "charm" is in physics. As Bayes shows, human idealization is no mirror of the stuff of nature. Such idealizations can never be anything more than tools people use in the management of their worldly environment. Even the most avid critics of Bayes today acknowledge that applied probability will always be constrained by the limited transducer function and epistemic mechinations of the human mind.

The Moral of the Story

This small piece of intellectual history brings together as promised philosophy, history, mathematics, science, and even a recognition that religious inclinations on the part of researchers is no fatal contaminant of sound thinking. That is how things are in the real world. The world is not divided up into knowledge silos as standardized tests would leave one to believe. The story of Bayes and others like him (Pastuer, Darwin, Einstein, and so on) show good thinking transcends mere operational competence within a narrowly defined context. Moreover, the stories of both Bayes and Pascal show that personal religious conviction is no threat to apt scientific work. Indeed, in the case of Pascal's wager, Pascal's religious conviction led to a protocol

for decision-making that is even today appreciated as analogically useful in heuristic fashion.

The imaginations of our most talented high school students are being stifled by reconstruction of subject matter and testing practices that constrain rather than release creative speculation and subsequent rigorous justification of reasoned claims. The practice of creating knowledge silos where testing practices and curriculum isolate each subject and field of study one from another fragments and destroys the development of general intellect.

There is no way to tell in advance which models, protocols or analogies developed in one field may prove productive in another. Indeed as the lives of George Boole (the lawyer who created algebra) and Francis Crick (the physicist who was a co-discoverer of the DNA structure) illustrate, it may well be analogies from a mind prepared in one discipline that prove useful to a mind naturally inclined to explore others. This too is illustrated in the live of Bayes and Pascal. Education should be in the business of preparing minds for analogical reasoning, doubt, revealing metaphors as well as the learning of stuff, skills and attitudes.

The great twentieth century philosopher, W.V.O. Quine called for a naturalized epistemology.[32] *By analogy* and for my part, I want to turn to educators and call for a "naturalized curriculum" accompanied by a more naturalized course of instruction.

Appendix A
Bernoulli's Limit Theorem

*Bernoulli's Limit Theorem in Modern Formulation: (For any given small positive integer $\in$ and any given large positive number c, N (total number of observations) may be stated so that by simple algebra the modern formulation is:

$$P(|\frac{x}{n} - p| > \in) < \frac{1}{(c+1)}$$

(Thus, given any $\in > 0$ and any c, N can be specified so that Bernoulli's law is proved. Roger Boscovich, another contemporary of Bayes suggested "objective probabilities" of the world could be identified (in modern notation) with the following device for aggregating data:

$$\Sigma(z + y\sin^2\theta - a_i) = 0$$

But in the end it was De Moivre's revision of Bernoulli's work that anticipated the possibility of inverse inference addressed by Bayes (where np is an integer) in modern notation:

$$E|x\text{-}np| = n2pq\,P\{x=np\} \quad \sqrt{2npq}\,|\rho$$

Appendix B
Bayes' Seven Definitions

Section 1

Definition	**1**	Several events are **inconsistent**, when if one of them happens, none of the rest can.
Definition	**2**	Two events are **contrary** when one, or the other of them must; and both together cannot happen.
Definition	**3**	An event is said to **fail**, when the possibility of its occurrence is zero.
Definition	**4**	An event is said to be **determined** when it has either happened or failed.
Definition	**5**	The **probability of any event** is the ratio of the value at which an expectation depending on the happening of the event ought to be computed, and the value of the thing expected upon is happening.
Definition	**6**	By **chance** I mean the same as probability.
Definition	**7**	Events are independent when the happening of any one of them does neither increase nor abate the probability of the rest.

Notes

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[2] Paul A. Wagner, "Essay Review of Amos Tversky et. al. (eds) *Judgment Under Uncertainty", Cognition and Brain Theory* Vol. 10, No. 3, 1984; pp. 248-253.

[3] F. N. David, *Games, Gods and Gambling* (New York: Hafner, 1962) Chapters 1, 2, and 3.

[4] Ian Hacking, *The Taming of Chance* (Cambridge, UK: Cambridge University Press, 1990) ch. 21.

[5] See for example, I. Todhunter, *A History of the Mathemtical Theory of Probability from the Time of Pascal to that of Laplace*, (London, UK: Chelsea, 1865)

p. 7: see also L. Hogben, *Mathematics in the Making,* (London, UK: Rathbone Books,1960) p. 250, and Christian Huygens' treatise, *De Rationciniis in Ludo Aleae* was published in 1657.

[6] Stephen Stigler, *The History of Statistics*, (Cambridge, MA: Harvard University Press, 1986), p. 4.

[7] Donald A. MacKenzie, *Statistics in Britain: 1865-1930*, (Edinburgh, Scotland: Edinburgh University Press, 1981) pp. 9-18, 230-239. See also, G. H. vonWright, *A Treatise on Induction and Probability,* (London, UK: Littlefield, Adams and Co., 1960), p. 18.

[8] L. J. Savage, *The Foundations of Statistics*, (New York: Dover, 1972); Wesley Salmon, *The Foundations of Statistical Inference* (Pittsburgh, PA: University of Pittsburgh Press, 1966) and David Lewis, "A Subjectivist's Guide to Objective Chance" in *Studies in Inductive Logic and Probability Theory, Vol. II*, R. C. Jefferey (ed.), (Berkeley, CA: University of California Press, 1980), pp. 263-294.

[9] See for example M. Norton Wise, "How Do Dums Count? On the Cultural Origins of Statistical Causality" in *The Probabilistic Revolution*, Vol. I, L. Kruger, L. J. Daston and M. Heidelberger, eds. (Cambridge, MA: MIT Press, 1987, pp. 395-426.

[10] Theodore Porter, *The Rise of Statistical Thinking* (Princeton, NJ: Princeton University Press, 1986), p. 93.

[11] W.S. Jevons, *The Principles of Science, Vol. I and II* (London, UK: Macmillan, 1874) See esp. Vol. I, p. 307 wherein Jevons, discussing Laplace and Bayes, speculates, " ... all inductive reasoning is but an inverse application of deductive reasoning."

[12] Stigler, ibid., p. 4.

[13] Sylvia Nasar, *A Beautiful Mind: The Life of Mathematical Genius and Nobel Laureate John Nash* (New York: Simon & Schuster, 1999). See also Norbert Weiner, *I Am a Mathematician* (Cambridge, MA: MIT Press, 1956); Joseph Warren Dauben, *Georg Cantor: His Mathematics and Philosophy of the Infinite* (Princeton, NJ: Princeton University Press, 1979) Ch. 12, Andrew Hodges, *Alan Turing: The Enigma* (New York: Simon & Schuster, 1983).

[14] Theodore Porter, *Trust in Numbers* (Princeton, NJ: Princeton University Press, 1995), p. 50.

[15] Ben Rogers, *Pascal* (New York: Routledge, 1999).

[16] Peter Bernstein, *Against the Odds*, (New York: Wiley, 1996), p. 69.

[17] Nicholas Rescher, *Pascal's Wager: A Study in Practical Reasoning and Philosophical Theology* (Notre Dame, IN: 1985).

[18] L. Jonathan Cohen, *An Introduction to the Philosophy of Induction and Probability* (Oxford, UK: Oxford University Press, 1989), pp. 24, 67-70; see also, L. J. Cohen, *The Probable and the Provable* (Oxford, UK: Oxford University Press, 1977).

[19] von Wright, op. cit., pp. 16-20.

[20] Thomas Bayes, "An Essay, Towards Solving a Problem in the Doctrine of Chances," *Philosophical Transactions of the Royal Society of London* 53: 370-418. Reprinted in *Biometrica* 45 (1958), pp. 296-315.

[21] David Salzberg, *The Lady Tasting Tea*, (New York: W. H. Freeman & Co.,

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[22] Ian Hacking, *An Introduction to Probability and Inductive Logic* (Cambridge, UK: Cambridge University Press, 2001), pp. 69-70.

[23] Patrick Maher, *Betting on Theories* (Cambridge, UK: Cambridge University Press, 1993).

[24] Lorraine Daston, *Classical Probability and the Enlightenment* (Princeton, NJ: Princeton University Press, 1988).

[25] Op. cit. M. N. Wise, pp. 395-426.

[26] See for example A. De Moivre, *The Doctrine of Chances* (London, UK: Fuller and Cleaver and more Correct than the Former, 1956).

[27] Ian Hacking, *Logic of Statistical Inference* (Cambridge, UK: Cambridge University Press, 1965) pp. 190-227. See also Jan von Plato, *Creating Modern Probability* (Cambridge, UK: Cambridge University Press, 1994), pp. 241-246.

[28] Ian, Hacking, *An Introduction to Probability and Inductive Logic*, (Cambridge, UK: Cambridge University Press, 2001), pp. 69-70.

[29] See Lorenz Kruger "The Slow Rise of Probabilism", in *The Probabilistic Revolution*, Vol. 1 L. Kruger et. al. (eds.) (Cambridge, MA: MIT Press, pp.59-90); Ian Hacking, "Was there a Probabilistic Revolution 1800-1930": in same volume, pp. 45-56.

[30] I. J. Good, "The White Shoe in a Red Herring, "*British Journal for the Philosophy of Science*, 17:322, 1967.

[31] R. Price, *Four Dissertations* (London, UK: Millar and T. Cadwell, 2nd ed. 1768). K. R. Klibansky and Massner, E.C. eds., *New Letters of David Hume* (Oxford, UK: Oxford University Press, 1954).

[32] "Comment on 'Holism and Naturalized Epistemology Confronted with the Problem of Truth' by Henri Lauener" in *Perspectives on Quine*, R. Barrett and R. Gibson (eds.) (London, UK: Blackwell, 1990) pp. 213-228. See also W. V. O. Quine, *The Pursuit of Truth* (Cambridge, MA: Harvard University Press, 1992).

Against Interpretation

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Introduction

In classrooms today, teachers spend an inordinate amount of time as observers of students rather than simply being in relation with them. Observing and then interpreting behavior seems to be the widely accepted path for informing and remediating both academic and behavioral problems. Teachers routinely analyze test results in order to inform subsequent instruction, and they regularly interpret misbehavior in order to develop behavior plans. Increasingly, the focus has turned to the individual student. Progressive and democratic forms of education claim it is vital that the teacher comes to know her students well. From this perspective, it is believed that, without full knowledge of her students' needs, interests and skills, the teacher cannot cooperatively create with her pupils an authentic or relevant curriculum, meaningful assessment and evaluation, or an atmosphere of trust and respect. However, I believe that an equally compelling argument can be made for there to be significantly less analysis and interpretation of students. Using psychoanalytic and philosophical rationales, one could issue a caution as to the extent to which individual students need to, or even should, become such known entities.

In efforts to make connections with students and between students and curriculum, educators seek to know more and more about their students and what makes them "tick." But, in our efforts to build such relationships, are we perhaps interpreting too much? Does the valuable time spent analyzing and interpreting promote or prevent effective

changes in behavior? In coming to know our students so well, and in this time of funding by identification, are we truly encouraging transformation or are we inadvertently continuing the tyranny of the status quo?

The purpose of this paper is to call into question the progressive approaches of education that encourage teachers to analyze and interpret as a means to an end of coming to know students well. In building a case against interpretation, student-centred ideologies will be criticized for their emphasis on exposing deep and hidden truths. In doing so, I will turn to both the literature on psychoanalysis and then philosophy of power in order to argue for less interpretation of, and reduced data banks on, individual students. First, D. W. Winnicott's ideas on destruction and survival will be explored in the context of a concept he describes as object use. At the same time, a link will be established between the psychoanalytic setting and the classroom. Next, Michel Foucault's work on power and control will be discussed as it relates to making students known entities. Following that, a specific teacher-student relationship will be investigated and reviewed using the philosophical and educational works of Nel Noddings, Vivian Paley, Martin Buber, Paulo Freire and Friedrich Nietzsche. Last, this same relationship will be revisited using both Winnicott's and Foucault's ideas.

Winnicott's *Use* of an Object through Destruction and Survival

In his book *Playing and Reality*, psychoanalyst D. W. Winnicott talks about his growing skill and confidence as an analyst who is able to wait until his patients arrive at their own understanding. He maintains that this understanding allows the patient to effect deep change within himself. The therapist's ability to wait, to withhold making interpretations, eventually leads the patient to develop the capacity to *use* the therapist in order to transform self and behavior. Winnicott explains that it "is the patient and only the patient who has the answers."[1] If one thinks of the teacher-student relationship as analogous to the analyst-patient one, then Winnicott's theory has significant implications for both teachers and students. Also, I believe that a classroom can be considered similar to the psychoanalytic environment insofar as they are successful only if relationships within them are predicated upon feelings of trust and acceptance. In this way, I think it is possible for us to gain some insight from Winnicott's ideas.

First, the teacher, like the analyst, serves as a guide while the student moves, actively and creatively, through the process of change. In order for this to be successful, however, the teacher needs to be accepting of both the student's independence in this process and his potential ability

to develop the capacity to use the teacher. Borrowing from Winnicott's theory that the answers lie within the patient, one might say it is the student and not the teacher who is the agent of change. The extent of change, therefore, is dependent upon two things: how effectively the student uses the teacher and the teacher's competency in facilitating student learning and agency. I believe that this stands in direct contradiction to what happens in many classrooms today in which it is typically the teacher who acts to force change. She observes the student, looks for patterns of behavior, and reports her findings. She is revered as having the answers and is viewed as the one who fixes things.

Taking the locus of control out of the hands of the teacher will worry critics who prize, and place a priority on, the teacher as a skillful classroom manager and the classroom as a place of democracy. But I am not advocating for teachers to merely step aside or for anarchy to reign in the classroom. Rather, I am suggesting that the teacher consider adopting a different view of both her students and her role in the classroom. If Winnicott's ideas are to be successfully applied, the teacher must put students in positions of power, at the center of the transformational process, and create a classroom environment in which they are genuinely free to exercise that power. This will be uncomfortable for some, downright threatening to others. To put students in such a position requires not only faith but also that the teacher holds the underlying assumption that students are basically "good."

Next, Winnicott's focus moves from the analyst to the patient as he discusses how the patient develops the capacity to use the analyst. In particular, Winnicott outlines how this first begins as an isolated and individual experience. Strangely enough, this is called object-relating. Then, as the analyst withholds interpretations and allows the patient to develop trust in the psychoanalytic setting and techniques, the patient develops the capacity for usage. This change from relating to usage, Winnicott states, "means that the subject [patient] *destroys* the object [analyst]."[2] What does this mean for students and teachers? Well, this transition from relating to usage, Winnicott goes on to say, does not happen automatically or merely with maturation. Rather, the teacher, as one "good enough,"[3] facilitates it. She does so not by coming to know her student well but by creating the circumstances that will allow the student to thrive and change. What are those circumstances? I believe that one of the most important circumstances is that the teacher does not interrupt the process of change within the student through her interpretations and analyses. In addition to abstaining from making interpretations and analyses, the second way a teacher facilitates this process is by surviving the student's attempts at destruction.

Ordinarily, one thinks of destruction in negative terms, as the impulse to destroy or ruin. But, in Winnicott's progression from relating to usage, destruction refers to the potential liability of the object (analyst) to *not* survive. If it does not survive, it *retaliates* instead. However, if there is *survival*, and *not* retaliation, the subject (patient) comes to love and value the object. Only now can the subject *use* the object that has survived. Therefore, the goal is to test the object. If the object survives, the subject can love and value it and then, most importantly, can use it. From an educational perspective, this has several implications. If the teacher retaliates, the student does not experience change. This could be due to a number of reasons. The teacher may retaliate by turning to measures of control, such as behavior plans or punishments and rewards. Conversely, she could talk with the student about his or her misbehavior. This conversation, though, would likely focus on her observations and analysis of the reasons for the student's actions. This would be tantamount to a second form of retaliation. In addition, the teacher's retaliation may not only hinder change but also disempower the student. For example, if the teacher retaliates by calling for more testing and observation of the pupil, this takes the transformative process out of the hands of the student and places it back with the teacher. Thus, the student's agency decreases. Last, if there is retaliation and not survival, the student loses out on the opportunity to use the teacher to enrich his own educational experiences.

On the other hand, if the teacher does not retaliate but survives destruction, then the student can use the teacher. At this point, the student and the teacher have the potential to enter into a relationship of a reciprocal nature. This relational notion of using the teacher is what distinguishes it from the negative connotations associated with instrumental use of others and therefore bears further discussion. As Winnicott explains, deep and lasting change occurs only after achieving object-usage. In this process of achieving object-usage, the student and teacher first exist as shared reality (in object-relating) and then separate entities. Thus, they maintain their individuality but are also connected. Winnicott's thoughts are echoed throughout the work of Jessica Benjamin. Benjamin speaks of this same process in her theory of intersubjectivity in which the self and other are seen as both distinct and interrelated. The student will not develop the capacity to *use* the teacher, and therefore his behavior will not change unless, as Benjamin states, the self "grows in and through the relationship to other subjects...[and] that the other whom the self meets is also a self, a subject in his or her own right."[4]

Thus far, I have explained D.W. Winnicott's notion of using others and have related it to both the teacher-student relationship as well as the educational setting. Throughout this explanation, I have not once

mentioned interpretive work. The teacher has not spent time collecting data, testing, analyzing or observing. Neither has the focus been on gathering information in order to create and implement a behavior plan or system of rewards and consequences. Instead, it has been the teacher's survival of the student's attempts to destroy her, achieved by withholding retaliation, that has enabled the student to both use the teacher and experience fundamental change.

Making the Student a Known Entity

Today, in contrast to Winnicott's ideas, there is a hunger for knowledge that is rife in most progressive and democratic pedagogies. For example, Winnicott's work reminds us that, as the student comes to develop the capacity to use the teacher to effect behavioral change, the teacher first has to be accepting of the student's independence and potential for success. At first glance, this acceptance seems reminiscent of Nel Noddings's *confirmation*, a vital component of practicing with an ethic of care. Noddings asserts, "When we confirm someone, we spot a better self and encourage its development."[5] Confirmation is grounded not in a Kantian single ideal or set of expectations applied to all. Rather, it is some admirable, or at least acceptable, unique potential in each individual that will come to fruition only in encounter or relation. Furthermore, confirmation requires trust and continuity. "It is a loving act founded on a relation of some depth,"[6] and in this regard it is imperative that the teacher has a strong knowledge of the student and what he or she hopes to become. Unlike Winnicott's idea of acceptance, though, the teacher has to know the student well in order to confirm him. In fact, Noddings goes so far as to say that "we respond most effectively as carers when we understand what the other needs and the history of this need."[7] Typically, this knowledge of the other is constructed through meaningful, open-ended dialogue, when the teacher is fully engrossed in and motivated by the student's needs. Noddings argues that the teacher does not use a predetermined set of strategies to change behavior. Instead, the teacher first attributes the best possible motive for the student's misbehavior. She does not do this through abstraction but by attempting to understand the other's perspective. However, the teacher can only do this because she has both constructed a deep knowledge of the student and listens attentively to what he has to say in order to ascertain his needs. Therefore, Noddings's idea of confirmation employs all of the analysis and interpretation that is so noticeably absent in Winnicott's approach.

Often, this seeking to know can be found in every facet of student-centered schooling and because of the very nature, in its present form, of the institution of school itself. Michel Foucault explains this best when

he discusses his philosophy of power. He describes power as "not something that is acquired, seized or shared, [not] something that one holds on to or allows to slip away."[8] Rather, it is relational and becomes apparent only when it is exercised. Now, the focus is on how power is exercised rather than by whom or from where. What are the practices, techniques and procedures that exercise power or bring power into effect? Power, Foucault suggests, is exercised by virtue of things being known and people being seen. In a school, one has only to look at assigned seating in classrooms, timetables, and marks to see how control is achieved by virtue of the physical structure. In addition to the physical structure, behavior plans and punishment are examples of the way behavior is supervised, largely, through coercive and normative sanction. When describing supervision of the physical structure, Foucault speaks of panoptism, or the "ensemble of mechanisms brought into play in all the clusters of procedures used by power."[9] Specifically, he refers to Jeremy Bentham's panoptism as a technological invention whereby surveillance is carried out in schools. Observers in this model then learn to develop files, systems of marking and classifying, and the integrated accountancy of individual records in order to compare, differentiate, hierarchize, homogenize and exclude. It seeks, in other words, to *normalize*.

This model of power can be seen in many aspects of student-centered assessment and evaluation policies. For example, under the guise of making evaluation more meaningful and student-directed, teachers may ask their students to self-assess and self-evaluate. For instance, students are asked to identify their strengths and weaknesses and are requested to comment on their own work. Borrowed from business models of micromanagement and growing out of contemporary procedures of individualization, Nikolas Rose outlines how, "in compelling, persuading and inciting subjects to disclose themselves, finer and more intimate regions of personal and interpersonal life come under surveillance and are opened up for expert judgment, and normative evaluation, for classification and correction."[10] In short, these measures are like examinations and the system of confessions that Foucault finds can be so useful for gathering information on individuals in order to judge and differentiate them. In essence, they permit the teacher to control the student.

Paulo Freire would agree with the premise that control is at the heart of teachers' analyses and interpretations of students and their behavior. Freire believes that teachers control their students by treating them as objects. Further, he outlines how dominant elites (which characterizes most teachers) regularly think without the people (students) but "do not permit themselves the luxury of failing to think *about* the people in order to know them better and dominate them more efficiently."[11] In this way,

the student begins to respond to the values, goals and standards of the teacher. In doing so, the teacher desires to know how her student apprehends reality—but only so she can dominate him more effectively. To this end, Freire asserts:

> teachers make increasing use of the social sciences and technology, and to some extent the physical sciences as well, to improve and refine their action. It is indispensable for teachers to know the past and present of students in order to discern the alternatives of their futures and thereby attempt to guide the evolution of that future along lines that will favour their own interests.[12]

One could go so far as to suggest that the more the teacher knows the student, the more controllable he becomes. Ironically, this practice of self-disclosure is carried out daily in classrooms across North America under the pretense of democracy and empowerment.

The Incident

From power and control one segues easily into notions of authority. It is here that I wish to introduce a teacher-student relationship and particular incident from elementary school that will be used to further elucidate the arguments made thus far. The student, let us call him Jason, was in Grade 5 at the time and reading several grades below expected levels of performance. In addition, he had been abandoned by his mother at a young age and had entered into foster care as a toddler. Jason's behavior was typified by angry outbursts, a refusal to accept responsibility for his own actions, and a street sense that had enabled him to survive thus far but was not conducive to learning and socializing within a school setting. Subsequently, the district psychologist and behavior team identified Jason as being characterized by "severe behavior." Such identification already puts Jason in the dubious position of being a known entity, a *case*. According to Foucault, this means "it is the individual as he may be described, judged, measured, compared with others, in his very individuality; and it is also the individual who has to be trained or corrected, classified, normalized, excluded, etc."[13] The extent to which Jason was *known* could not be underestimated. He had undergone many hours of testing and observation until a diagnosis was reached and a label assigned. As a result, after much data collection and interpretation, I, as Jason's teacher, knew all about his life history, anger triggers, and academic standing. I knew of his strengths and weaknesses and about the difficulties he had relating to others.

Jason, as a *case*, was now labeled abnormal and viewed and treated as different from others, just as Vivian Paley's student, Lisa, viewed

rejected classmates as different. However, as Paley remarks in her book, *You Can't Say You Can't Play*, "They are *not* different. What makes them outsiders is simply that they are *treated* as outsiders."[14] Together with Jason's classmates, I too treated him as different. I did so, first, through extensive observation, then by the imposition and maintenance (through surveillance and rewards) of a behavior plan and, finally, by excluding him from regular classroom participation every time he misbehaved. In doing so, we were all party to the social construction of Jason as an outsider and had gotten into the *habit* of excluding him. Ironically, the more this treatment continued, the more aggressive Jason became. His behavior did not improve, relative to existing standards of accountability, as I am sure Nietzsche would have predicted when he said that "punishment *tame*s [makes hard and cold] men, it does not make them "better"—one might with more justice assert the opposite."[15] The rewards and punishments provided Jason were in fact not linked to the good and bad behavior. On the contrary, they were borne out of an arbitrary set of rules and consequences having been both historically, and in the present, willed to power. Then, those in authority, namely Jason's teachers, the school's administrators, and district policy makers, fashionably imposed them. Consequently, just as Paley remarked about how the approach is, generally, to help the outsiders develop the characteristics that will make them more acceptable to the insiders, it became my goal to change Jason's behavior. Swiftly and perhaps even unintentionally, it came to be that, "all the mechanisms of power which are disposed around the abnormal individual, to brand him and to alter him," were at work.[16]

In seeking knowledge *about* Jason and trying to diagnose what was wrong and correct it, I was wasting valuable time on Nietzsche's doer and passing moral judgments on his deeds. With Nietzschean *ressentiment*, I had projected onto Jason a label of evil and, as evidenced by my attempts to alter his behavior, I needed to place blame on him for behavior I could not control. I was not, as Nietzsche would suggest I should, looking at this situation from many different perspectives. I had assumed my role as informed authority figure and oppressor instead of controlling my "Pro and Con and [disposing] of them [in order to] employ a *variety* of perspectives and affective interpretations in the service of knowledge."[17]

In trying to analyze Jason's behavior, I never entered into a genuine dialogue with him. Although we had many conversations, these conversations were a tool for me to analyze him further, not to enter into dialogue. I believe, like Buber, that simply being present with another is a vital aspect of true dialogue. However, by establishing neither the necessary conditions nor adopting the appropriate attitude, I failed to be present with Jason. As Martin Buber so eloquently states, "I do not find the human being

to whom I say You in any Sometime and Somewhere. I can place him there and have to do this again and again, but immediately he becomes a He or a She, an It, and no longer remains my You."[18] Once I had placed Jason in space and time in order to analyze his behavior, he became an It. Embarrassingly, I was exercising what Freire would call vertical authority and acting with an oppressor consciousness whereby everything around me, including this young student, was transformed into an object of domination. With hypocrisy and inalienable might, I wielded my authority over Jason with the establishment of this relationship of oppression.

One day, after a particularly explosive encounter, Jason pushed me into a bookcase. Strangely, I did not, to borrow Winnicott's idea, *retaliate—as I had in every instance up to this point!* It was as if the world had suddenly stopped and, for reasons for which I still cannot lay claim, I turned to Jason and told him, "I will *never* leave you. There's nothing you can do or say to your classmates or me that will ever make me leave you." I had gone forth in a most unteachable way, Buber would suggest, in that my reactions to Jason were neither prescribed nor preordained, not premeditated or as a result of interpreting his behavior. Rather, I had drawn that circle that excluded everything else and "the one needful thing [had become] visible: the total acceptance of the present."[19] That relation to Jason as a You was unmediated. It was so created because "nothing conceptual intervened between [the] I and You, no prior knowledge and no imagination; and memory itself [was] changed as it plunged from particularity into wholeness. No purpose intervened between [the] I and You, no greed and no anticipation; and longing itself [was] changed as it plunged from the dream into appearance."[20] I was not consciously thinking of prior run-ins, of behavior plans or analyses, though I wonder if somewhere deep in my head I had done a quick mental calculation as to their previous ineffectiveness? No. I was standing before an enraged boy and, with an open mind and strong heart, responded to his invitation (That push!) with words of presence. It was only through my *survival* of Jason's attempts to destroy me, and because I did not *retaliate*, that Jason and I then achieved mutual recognition. How did I know? As I outlined earlier, Winnicott talked about the subject coming to love and value the object that survives destruction. The next day, after greeting Jason as he entered the classroom, he responded by encircling me with the warmest and yet most unanticipated hug I have ever received.

Of course, the obvious question is whether or not Jason's behavior changed (and had he changed it). But before answering that question, I think another, perhaps more vital, question needs to be asked and answered: Had *my* behavior changed? Indeed, I no longer sought to analyze and interpret every situation with Jason after that significant

push. Nor did I look for patterns of behavior, discuss anger triggers, or request any more testing. Just as Jason's misbehavior decreased as he developed the ability to use me (in the manner suggested by Winnicott), so did mine. Yes, my misbehavior—my desire to control and change his behavior and the acts I justified in this pursuit—diminished as well. I was no longer in search of truth and certainty through observation, analysis and interpretation. Over the ensuing months, Jason's violent outbursts lessened in both frequency and intensity. We were both transformed.

Conclusion

It is difficult, Nietzsche rightfully asserts, to explore truth, absoluteness and certainty when so much of science points in one direction over another. Are there really any absolutes or truths, he may ask? We must call everything into question; indeed, we must call into question the values of such absolutes as "absoluteness" and "certainty." We should not be ruled by laws and causes as Kant would have it, not be caught up in causality and thereby living oppressed in Buber's It-World. Nor, I propose, should we be so easily swept away by the tide of individualism that is so much a part of progressive learning objectives and teaching strategies. Rather, it is incumbent upon us to not only assume several different perspectives but to do so critically. As such, one might approach behavior and academic problems with less interpretation and analysis, just as Winnicott suggests. Ultimately, we may find that transformation is not only possible, but also even more likely, when the teacher searches less to know and understand the student and simply stands in relation with him. Indeed, as Buber would have it, this "can be done only if [the teacher] enters as a partner into a person-to-person relationship, but never through the observation and investigation of an object."[21]

Like Winnicott, Freire shares this commitment to the individual as having both the ability and the responsibility to be a liberator, to transform behavior and situations of oppression. He suggests that when the student resists and there are conflictual student-teacher relationships, then change is needed. Jason could certainly be described as resisting, and our relationship was most definitely a tumultuous one. In the end, Jason learned to confront reality critically, simultaneously objectifying and acting upon it. Then, by developing the capacity to use me, Jason transformed both of us. Once I survived Jason's attempts at destruction by not retaliating, I no longer had to analyze and interpret, to use behavior plans and punishments and rewards. I could be in dialogue with Jason, treat each occasion as a teachable moment, and assure him that I would never leave. No longer was there a controlled and deliberate

separation of subject and object, self and other. Instead, the drive towards reconciliation had led to the teacher-student with the student-teacher. It became a classroom in which the traditionally vertical patterns of relationship were broken and replaced by ones in which I was "no longer merely the-one-who-teaches, but one who is herself taught in dialogue with the students."[22] No longer were actions analyzed, interpreted, restricted and prescribed, all of which had been limiting our ability to be in relation with each other. Ultimately, it was this relation that enabled Jason to grow and change as an individual. Our challenge as teachers, then, is to strive to always first be in relation with our students so that they may transform and flourish.

Notes

[1] D.W. Winnicott, *Playing and Reality* (Middlesex, UK: Penguin, 1971), 102.

[2] Ibid., 105.

[3] For discussion on Winnicott's notions of the "good enough mother" and how this idea of "good enough" may relate to teachers, as well, see Winnicott, *Playing and Reality*, p. 104. Refer also to Charles Bingham's work, "Pragmatic Intersubjectivity, or, Just using Teachers" in the *Philosophy of Education Society Yearbook*, 2004, for a more detailed explanation and educational application of the teacher as one "good enough."

[4] Jessica Benjamin, *The Bonds of Love* (New York: Pantheon, 1988), 19-20.

[5] Nel Noddings, *The Challenge to Care in Schools: An Alternative Approach to Education* (New York: Teachers College Press, 1992), 25.

[6] Ibid., 25.

[7] Ibid., 23.

[8] Michel Foucault, *The History of Sexuality*, trans. Robert Hurley (London, UK: Penguin, 1981), 94.

[9] For discussion on Bentham's "Panopticon" as a model for surveillance and the use of confession, see Michel Foucault's *Power / Knowledge: Selected Interviews & Other Writings 1972-1977*, ed. Colin Gordon, trans. Colin Gordon (Brighton, UK: Harvestor, 1980).

[10] Nikolas Rose *Governing the Soul: The Shaping of the Private Self*, 2d ed. (London, UK: Free Association, 1999), 244.

[11] Paulo Freire, *Pedagogy of the Oppressed*, trans. Myra Bergman Ramos (New York: Continuum, 1970), 131.

[12] Ibid., 153.

[13] Michel Foucault, *Discipline and Punish*, trans. Alan Sheridan (New York: Vintage, 1979), 191.

[14] Vivian Gussin Paley, *You Can't Say You Can't Play* (Cambridge, MA: Harvard University Press, 1992), 68.

[15] Friedrich Nietzsche, *On the Genealogy of Morals*, trans. Walter Kaufmann & R. J. Hollingdale (New York: Vintage, 1967), 83.

[16] Foucault, *Discipline and Punish*, 199-200.

[17] Nietzsche, *On the Genealogy of Morals*, 119.

[18] Martin Buber, *I and Thou*, trans. Walter Kaufmann (New York: Touchstone, 1970), 59.

[19] Ibid., 126.

[20] Ibid., 62-63.

[21] Ibid., 179.

[22] Freire, *Pedagogy of the Oppressed*, 44.

Qualities of Democracy:
Links to Democratic Leadership

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Introduction

For the school principal, recent trends—such as increasing student diversity, achievement disparities, democratic schooling, and accountability testing—have created a perfect storm, one that promotes research, reflection, and dialogue. Evidence, for instance, is beginning to emerge that principals with accomplished careers in the state of Texas are losing their jobs because of low test scores, and those Texas principals who serve as leaders of schools with diverse student populations are especially vulnerable (McGhee & Nelson, 2005). In defining the worth of students, teachers, and principals by test scores, education is turning further away from the very substantive qualities—like responsiveness, equality, and respect for civil and political freedoms— which are necessary for a healthy democracy. Such inattention leaves a democracy vulnerable, for as Dewey reminds us, "What nutrition and reproduction are to physiological life, education is to social life" (1916, 9).

At no other time in the field's history have educational leaders been so aware of the importance of leadership to the enduring good health of education and to that of democracy (Goldring & Greenfield, 2002). Westbrook believes that as a result of decades of educational neglect, the American democracy has weakened, and its prospects are dim (1996). Bracey writes that *No Child Left Behind* has produced academic atrophy in the social sciences, languages, and the arts. "A little more of this and we can declare 'No Education Left'" (Bracey, 2004, 17).

For long-established democracies like the United States, Canada, and the United Kingdom, the psychological and political advantages of linking educational leadership to democracy are obvious, especially in light of our own vulnerability and our realization that the most potent influence against outside forces is a populace that understands democracy and the effort needed to make democracy work. As Westheimer and Kahne (2003) note, the lesson that many are learning is that democracy is not self-winding.

Cultural Context

Executing democratic leadership within schools is an essential task, although not an easy one. Many of today's schools have lost recognition of their central purpose, to educate future citizens to live in a democracy. And they have done so because of public pressure. *A Nation at Risk* held schools accountable for maintaining America's economic vitality and global standing rather than stimulating interest in democratic ideals (Chubb et al., 2003). Although it is true that democracy frequently thrives in societies that are economically viable, should schools be held accountable over that which they have no control? We have too often and unrealistically expected public schools "to compensate for the shortcomings of our society" (Reyes, Wagstaff, & Fusarelli, 1999, 183). Eliminating poverty, reducing crime and lowering unemployment, while helpful, does not by itself sustain a democracy. For example, three fourths of high school students take the First Amendment for granted, and only one adult in 100 can name the five freedoms guaranteed by the Constitution (Yalef & Dautrich, 2005). Furthermore, the business community plus state and federal governments are now major players in education. This involvement often chips away at the foundation of democracy, its grass roots.

Another reason for concern is that even as democracy spreads in parts of the world and more people are liberated from tyranny and oppression through gaining their right to vote (Diamond & Morlino, 2004), the United States seems to have lost a sense of its democratic self. During the recent presidential election, that awareness showed itself in three venues. The three major television networks used the national spotlight of morning and evening news programs to urge people to vote. Advertisements and campaigns from private citizens urged others to vote. Polling places were open several weekends in advance of the traditional Tuesday to meet demand for accessibility. If schools and other educational entities had held fast to their original purposes and been successful in their pursuit of them, Americans would not have needed

these reminders. They would have known that exercising their rights depended on executing their responsibilities.

Joseph Murphy (2002) writes that our current practice of educational leadership has very little to do with either leadership or education. He argues that we need to base a new understanding of leadership on three metaphors: moral steward, educator, and community builder. Citing the work of Osin and Lesgold, Murphy believes moral stewards provide real learning opportunities to all students and create a moral order of shared values and beliefs. Community builders have an open door policy and honor community access and voice in decision making. These metaphors, when combined with that of the educator, are examples of educational leadership in a democracy.

Yet as Furman and Shields (2003) note, Murphy does not attempt to define *democratic community* or for that matter *democratic leadership*. The problem with definition lies with the slippery nature of the individual terms: *democracy*, *community*, and *leadership*. These terms mean different things to different people and they change meanings within different contexts. As Maxcy notes, "the meanings of democracy are so varied that political regimes from the most authoritarian to the most anarchistic invoke the term in their self-descriptions. Anyone can use the term *democratic* to explain [any] organization" (Maxcy, 1995, 57). The fact that leadership itself has no commonly accepted definition (Yukl, 1994; Leithwood & Duke, 1999) further contributes to the fuzziness and the problem of defining democratic leadership.

Such fuzziness is indicative of a field in crisis, another reason why defining and executing democratic leadership is so challenging and complex. Educational administration has adopted a big tent strategy (Donmoyer, 1999) to accommodate the proliferation of competing articulations regarding leadership. Some researchers, in their willingness to try anything, have targeted the community as a whole as the most effective moral agent, and not the individual leader. For Furman (2003), a culture that values communal skills and practices promotes the moral purposes of social justice, racial equity, and learning for all children. Expressions of explicit discontent about educational administration preparation programs have increased, Levine's attack being the latest. Couple that with the ongoing debate as to an accepted definition of a fundamental cornerstone—leadership—and the field of educational administration exhibits all four symptoms that Kuhn (1996) requires for a field to be in crisis.

The Interstate School Leaders Licensure Consortium (ISLLC) standards identified knowledge sets, skill sets, and dispositions of effective school leaders. Yet these standards and other attempts to identify a

leader's strengths and skills do not address a critical component of leadership, i.e., the roles and responsibilities of followers. Furman is right in stating that the community holds the most potential to exercise democracy, but in order for a community to model such behavior, leaders who have the trust of the people must embrace democratic community involvement. What the ISLLC standards do not explain and the field is only beginning to articulate is that leadership, and for that matter democracy, are social conventions that humans have constructed. Both exist because people believe they serve a necessary function.

Democracy's power resides in the hearts of the people, and it is that power to which democratic leadership must turn. Democracy's primary function provides for individual expression within a framework of social order which is ever advancing relevant ideals. School leadership's purpose, at the most fundamental level, is to keep chaos at bay and provide a climate in which all students can learn. Democratic leadership then, at its most fundamental level, understands that a leader's power, no matter whether he or she is defined by the organizational chart as such, or exhibits the skills and strengths defined by the field, or has simply stepped up to assume a leadership position, rests with the sentiment that resides within the people. Within the current modernist culture of educational administration, that makes democratic leadership an oxymoron.

Conceptual Frameworks

Democratic leadership has ebbed and flowed in popularity throughout the history of education. Consequently, educational theorists and researchers have repackaged it numerous times. For instance, Dewey's theory of knowledge posited that the production of knowledge is a social process, and from that process a democratic social intelligence develops over time (Westbrook, 1991). As a result, in such a morally democratic society, individuals can find their greatest human fulfillment. Following the lead of Dewey, Furman and Sheilds (2003) and Maxcy (1995) advocate the practice of deep democracy within schools. Such a community would embrace the ideals of individual worth and dignity, the value of respect for and dependence on others, and the process of free and open inquiry and critique, all centered around the common good.

Starratt (2001) also incorporated Dewey's pragmatism as a basis for his own democratic leadership theory. He argues that human beings are intrinsically social and that democratic living is a form of moral leadership and requires civic virtue or action on others' behalf, sometimes at one's own expense. He sees democratic leadership's priority as cultivating "an environment that supports participation, sharing of ideas, and the virtues

of honesty, openness, flexibility, and compassion" (2001, 338). Among the numerous activities of the democratic leader, Starratt emphasizes that the first is to remake American schools into miniature democracies.

For a working principal, turning a school into a miniature democracy is mind boggling. Time constraints, high-stakes testing, and the chaotic, frenetic pace of managing a school, are just a few of the obstacles she or he encounters. Many principals, therefore, are convinced that there are simply not enough hours in a day to accomplish this feat. Schools, they believe, cannot replicate all of the procedures through which democracies work. Cultivating deep democratic ideals takes time, time which the demands for accountability do not allow.

Yet the link between sustaining a democracy and education is critical. We are living with the results of decades of neglect and confusion about sustaining our democracy. Now through increased accountability measures, specifically testing and public reporting of test results without regard to the human quotient, we have added an additional moral dimension to democratic leadership. At the principalship level, that moral imperative can be seen in the increasingly numerous faces of children who do not meet state requirements for promotion.

Moral Dimensions of Democratic Leadership

Hodgkinson (1991) notes that without value conflicts there is no real need for leadership. Starratt, too, clarifies that issues of educational cause and effect underline the urgency for moral leadership. "Individuals learn in schools to be a somebody or a nobody. They learn to be a nobody by experiencing ridicule, humiliation, and most of all, indifference" (1994, 23-24). This drama unfolds in every school building, every day, and the stakes are high. The cumulative effect literally shapes students for a lifetime. And the lives shaped shape our democracy.

In a similar way, Leithwood and Duke (1999) center moral leadership on the values and ethics of the leader. As a subset of that category, they include democratic leadership. However, the specific behaviors and attitudes of a democratic style remain ambiguous. While the authors partially describe democratic leadership by using such concepts as participation, collegiality, and site-based management, they resist a definition of leadership that is inclusive of explicitly moral components. Perhaps part of the challenge is that it is difficult to characterize a style as democratic, because a democracy is based on the premise that no member of the group is superior to other members. This premise does not translate well into traditional leadership philosophies that assume a hierarchical organizational pattern or, at the very least, are based on

perceived notions of a leader as an individual with superior skills or talents.

Qualities of Democracies

Democracy, of course, is an ideal that has long had followers. People are in fact willing to fight and to die for that ideal (Menand, 2001). Since the 1970s, the advance of democracy across the planet has been ambitious. According to Election Watch (2004), 31 countries from Afghanistan to Uzbekistan held democratic elections between October, 2004, and September, 2005. Democracy is the flavor of the month for many emerging governments, and the research has gone from studying the "why" of emerging democracies to asking "what" those democracies look like, specifically what qualities do they have in common despite their fundamental differences. The motivation for such research is to investigate the moral dimensions of democracy, the reforms to improve democracy, and to help solve the problems of disenchantment and public dissatisfaction that plague long-standing democracies (Diamond & Morlino, 2004).

Diamond and Morlino acknowledge the controversy surrounding their attempt to identify dimensions of quality within democracies. Inasmuch as this field of study is only now emerging, it is to be expected that there are more questions than answers at this point. Even so, Diamond and Morlino are convinced that the three main goals of a good democracy are that it accords its citizens "ample freedoms, political equality, and control over public policies and policy makers through the legitimate and lawful functioning of stable institutions" (2004, 22). And it is from that point, acknowledging the controversy of what they do, that the authors identify eight dimensions on which democracies can vary in quality. Those eight dimensions are: the rule of law, participation, competition, vertical accountability, horizontal accountability, respect for civil and political freedoms, equality, and responsiveness.

Diamond and Morlino's three substantive aspects of a democracy—responsiveness, equality, and a respect for freedoms—may offer a more immediate framework through which we can better begin to understand the concept of democratic leadership. Like democracy, democratic leadership based on these substantive qualities is an idea that an individual chooses to embrace. Its strength comes from values, beliefs, attitudes, and emotions rather than a particular management style. Given that while the procedures of a democracy are critical to its functioning, substantive democratic qualities will allow democratic leadership a flexibility of spirit, ideas, and heart that education needs in order to reclaim a central role in the preservation of a democracy, to meet the

needs of diverse learners, and to reclaim the validity in meaningful learning.

Responsiveness

Responsiveness may be the strongest component of democratic leadership. Within democracies, "democratic responsiveness is what occurs when the democratic process induces the government to form and implement policies that the citizens want" (Powell 2004, 91). From handling site problems as they arise to implementing new policies from the board of education, the people's representatives see responsiveness as the job description of the principalship. Through responsiveness, democratic leadership can meet the needs of increasingly diverse students with their disparities in achievement and resources.

While this democratic quality is deeply embedded in the historical responsibilities and duties of the principal, not all principals are sensitive to its implications. If they are not insightful about their responsiveness demands, principals easily become ineffective. However no democratic leader can please everyone all of the time. Like their political counterparts, educational democratic leaders have to set priorities and make difficult choices, especially in an era of limited resources (Diamond & Morlino, 2004).

Oddly, perhaps, the increasing emphasis on accountability by testing can also be partially addressed through responsiveness: not responsiveness to cultural demands but rather responsiveness to democratic needs. Democratic leaders should help the public understand that education is not an athletic event with winners and losers. Instead, schooling is better seen as a means of identifying democratic leadership, educating a future citizenry, and promoting a meritocracy (Spring, 2006). By reclaiming this purpose of schools, democratic school leaders can use the momentum generated by accountability reform to resurrect democratic ideals.

Such a task is not easy, but when a culture does not work, cultural reform is needed. Principals and other school administrators who see the cost of high stakes testing reflected in the faces of children who have failed should be unwilling to fall back on the theme of responsiveness to appease society's criticisms. This time the cost is too great. Instead, school leaders should be willing to respond to the needs of children, our future citizens, and it is that responsiveness that will ultimately help provide better schools for a democracy. But to do this, administrators must have the courage to examine their own values and beliefs and this moral imperative.

Equality

According to Steven Pinker, there are two ways to get something you want from other people: "steal it or trade for it. The first involves the psychology of dominance; the second, the psychology of reciprocal altruism" (2002, 297). Quoting the legal scholar, John McGinnis, Pinker establishes that the Constitution minimizes the use of dominance and maximizes the use of reciprocity. To solve conflicts through reciprocity rather than violence benefits both schools and societies. Reciprocity, in turn, is based in part on understanding and practicing equality. Equality remains an ideal in our democracy even if we historically and presently have failed to realized the full implications of the concept in society and schools. John Dewey, for example, argues that democracy very early became a captive of capitalism and with it our schools (Starratt, 2001). One may argue that the educational reforms, laws, policies, and practices since Dewey's observation have not sufficiently moved us in the direction of educational equality and equity.

For the educational leader, the reform efforts of the last century and the early part of this one are complicated by the complexity of teaching and learning, the effects of leadership on teaching and learning, and the diversity that children bring with them to the school. Every day principals face a critical problem: How do you educate children who are not the same within an educational system accountable to state and federal quality control? Set that problem within the context of a society critical of education and the conundrum grows.

Educational leaders recognize that all students are equal under the law. Translated that means that the law has to be blind to class, status, and power. Democracy is possible only if this happens. For the educator who would be a democratic leader, creating a climate where every student counts is critical for making progress toward the ideal of equality. Such heartfelt action creates barriers against discrimination on the basis of gender, race, ethnicity, religion, political orientation, or other conditions. However, as Margaret Grogan (2004) notes, many of us have lost faith in the power of the courts to solve educational equity problems. The rule of law needs assistance from the culture and the schools in the form of beliefs, attitudes, and values that align themselves with the substantive qualities of democracies.

We know that those who are interested in equality are also interested in closing the achievement gaps between various groups, and that the principals who help teachers raise student achievement scores exhibit thirteen critical success factors. These include creating a focused mission, setting high student expectations, implementing good instructional

practices, creating a climate where every student counts, using data to guide improvement, keeping everyone informed, collaborating with parents, managing the change process, using time innovatively, gaining central office support, and keeping abreast of new research (Fry, Bottoms, & O'Neill, 2005). Accordingly, Hoachlander, Alt, and Beltranena (2001) found compelling evidence that effective leadership by principals and superintendents can improve both teaching and learning.

However, improving test scores does not automatically promote social or economic equality or equity. Improving test scores does not demonstrate to future citizens how to participate in and sustain their educational gains as citizens in a democracy. Reading and mathematics test scores are not the backbone of a democratic nation; reasoning is. And informed speech is an important route to reason. Or rather it used to be before discourse and debate became emotionalized. Public discourse has placed the United States democracy deep into a political emergency, thanks to practices of distraction, demagoguery, and deception in politics (Gitlin, 2004). "The infrastructure of power that is responsible for our predicament today is decades in the making, and it will take at least decades to unmake it, if unmake it we can" (13).

To help unmake this predicament, education's leadership has to pull education from the grasp of the aristocracy of money and restore balance with the aristocracy of mind. Yet, to promote equality, democratic leadership must create a climate that allows debate, discourse, and deliberation of ideas and issues. Leadership cannot do this by focusing completely on the narrow goal of training children to be good employees who can read and do math.

Respect for Civil and Political Freedoms

This substantive quality is key to a democracy. For it is through another procedural quality, participation through rights (the right to vote, to assemble, to organize, to protest, and to lobby) that this kind of respect is developed and sustained. Such participation influences decision-making in society and schools. More nebulous than the other two qualities, respect involves ideational and attitudinal concerns.

Ideas are in some ways like viruses. They are social, plentiful, and require an individual who will host them. As are viruses, ideas are not immutable, but adaptable (Menand, 2001). As such, the idea of respect for civil and political freedoms is partially at the mercy of culture, changes in personal and professional fortunes, and socialization practices. Similarly, attitudes toward civil and political freedoms are greatly influenced by cultural experiences and developments. Hence, the need for educa-

tional leaders is to ensure that these freedoms are not taken for granted but are cultivated and critiqued in class and staff rooms.

For democratic leaders, perhaps a first step is the realization of how fragile democracy really is. For all of its grand buildings and important people, democracy is fundamentally an idea, a collective idea that the populace has agreed benefits them. To sustain and practice the idea takes respect for civil and political freedoms, participation to ensure those freedoms, and education to sustain the desire and responsibility to participate. Democratic leaders, among other considerations, can use their constitutional freedoms to lobby for the importance of a free public education to sustain the democracy. They can organize, not as unions or bureaucracies, but as individuals committed to perpetuating responsiveness, equality, and respect for freedoms. Such activism requires attributes of courage, motivation, and a deep belief that democracy is as Diamond and Morlino believe, a moral imperative that must be sustained. This commitment requires civic virtue, the ability to act not only in the interest of oneself but in the interest of others.

At this point, a word of warning is needed. Hobsbawn (2004) believes that spreading democracy worldwide can be a dangerous idea. Powerful states, he contends, do not reorder the world according to democratic or universal rights; rather, they are inclined to put their own national interests first. Democratic educational leaders must also beware of succumbing to this temptation, the enticement to put personal or career interests before student, staff, and societal interests. Emergent democracies—in schools as well as in societies—function well through a bottom up flow of ideas and thoughts. It is through influencing this process and emphasizing the ideas that reflect equality, responsiveness, and respect, that democratic leaders can best nurture democratic community in their schools.

Democratic leaders may also wish to challenge staff and students to consider adopting a learner's Bill of Rights for their schools. Rathbone (2005) proposes one that delineates eleven student rights. The tenth one is the right to respect, a right that involves problem solving: "The unresolved problem and the unfinished thought are a very real part of learning, and they deserve the considered attention of a teacher who cares about the student's thought process as much as the end product" (473). That right is as fundamental to the citizens of a democracy as it is to a learner.

Conclusion

A free and public education is fundamental to democracy (Dewey,

1916; Starratt, 2003; Westbrook, 1996). Our educational system came into being for the purpose of sustaining democracy, of embracing meritocracy, and addressing public concerns like crime, poverty, and nutritional health. Educating children to read and write is essential to a democracy, but educating future citizens as to their rights and responsibilities for maintaining that democracy is vital to its survival. More than any other government-sponsored activity, education mirrors the social, political, and economic gaps that threaten a democracy. At the moment, that reflection is distorted by the interests of dominant groups who do not find a genuine democracy to be in their best interests. The gaps of wealth, power, and privilege are widening, but they are not the results of low test scores. The gaps are widening because children are not being educated as future citizens who are convinced of the importance of subscribing to and practicing democratic values and processes.

We have in the past relied on cultural models for those styles of educational leadership that would best serve children. But such responsiveness to this critical culture, which measures a child's worth in test scores, does not serve children well. Accountability through testing does not meet the needs of students who evidence vast disparities in resources and achievement. Our hope lies largely with democratic educational and political leadership; moreover, our best hope lies with a democratic leadership nourished by the three substantive qualities of a democracy—responsiveness, equality, and respect for rights and freedoms.

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Use the *Chicago Manual of Style*, 15th Edition or the *Publication Manual of the American Psychological Association* (5th Edition, APA). See Submission Guidelines on the inside back cover of this issue for details.

How long does it take for the editors and reviewers to make a decision about a manuscript?

During the academic year, the response time is approximately fourteen to sixteen weeks. Manuscripts submitted in the late spring and summer may take additional time.

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A Good Idea Gone Awry:

A Comparative Study of Jefferson's *Bill for the More General Diffusion of Knowledge* and Bush's *No Child Left Behind* Act

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Introduction

When it comes to analysis of trends and policies, educational historians have advantages over other educators. Educational history, as described by David Tyack and Larry Cuban, "provides a generous time frame for appraising reforms. It is not driven by the short-term needs of election cycles, budgets, foundation grants, media attention, or the reputations of professional reformers"(Tyack & Cuban, 1995, p. 7). Educational historians actively discuss educational reforms in terms of the contemporary's use of the past; they know that there is very rarely anything "new" in educational reform.

Such is the case with the *No Child Left Behind* Act (NCLB). Standards, highly qualified teachers, funding, and accountability are just four of the many areas of contention surrounding nineteenth and twenty-first century public schools in the United States. While the philosophical purposes of both NCLB and Thomas Jefferson's *Bill for the More General Diffusion of Knowledge* were arguably different—Jefferson's 1779 Bill had a political purpose, while the 2001 Act had an economic purposes—Jefferson's, in fact, shared many of the same facets as NCLB and led to the same debates.

It would be impossible for a work of this size to present, even in pithy summaries, all Titles, Parts, and Subparts of NCLB's near-670 pages, let alone its basis in proposed legislation of the early national period. However, an examination of shared legislative features (similarities in

context, purpose, and provisions) is possible, as is a discussion of the primary student beneficiaries and those negated, as well as an investigation of legislative and public reaction to each.

Contextualization and Purpose

Although separated by more than two hundred years, the two pieces of legislation were crafted in remarkably similar social and political contexts. In 1779, the new nation experienced a rise in patriotism even as the country was reeling from the effects of the Revolutionary War. In 2001, the nation was experiencing a rise in patriotism in response to the effects of 9/11. During both periods, deep political and ideological divisions separated Americans—Federalists vs. Anti-Federalists or Democratic vs. Republican. Accordingly, during both periods Americans looked to the schools to simultaneously help heal wounds and draw the country closer together.

When Jefferson drafted his first bill, the United States was still a fledgling nation. Jefferson and many of the forefathers perceived education to be a means to preserve the republic. As noted by historian Bernard Bailyn, "[m]ost of the major statesmen had sweeping schemes for national systems of education and national universities, or other programs by which the new nationalism and its republican spirit might properly be expressed"(Bailyn, 1972, p. 45).[1]

The founding fathers recognized that an educated populace was a need more than a desire. Words—and the ability to read them—were of the utmost importance in the new republic. Indeed, while the war gained independence, "the meaning of that independence was largely determined through writing" (Trees, 2004, p. 3). Subsequently, in 1779, Jefferson proposed his *Bill for the More General Diffusion of Knowledge* to the Virginia State Legislature. In Section I of the Bill, Jefferson outlined the two facets of his argument for public education: prevention of tyranny and the production of educated legislators.

First, Jefferson (1779) indirectly warned his audience that, even in a new republic, the adage "power corrupts; absolute power corrupts absolutely" could still become true. He wrote in terms of introduction:

> Whereas it appearath (sic) that however certain forms of government are better calculated than others to protect individuals in the free exercise of their natural rights, and are at the same time themselves better guarded against degeneracy, yet experience hath shewn (sic), that even under the best forms, those entrusted with power have, in time and by slow operations, perverted it into tyranny. (*Bill for the More General Diffusion of Knowledge*, p. 365)

Education, to Jefferson, was the best means of preventing this gradual regression into tyranny. He continued:

> the most effectual means of preventing this would be, to illuminate, as far as practicable, the minds of the people at large, and more especially to give them knowledge of those facts, which history exhibiteth, that, possessed thereby of the experience of other ages and countries, they may be enabled to know ambition under all its shapes, and prompt to exert their natural powers to defeat its purposes. (Ibid)

In addition to preventing the spread of tyranny, Jefferson believed that intelligent lawmakers would lead to an effective government that would, in turn, lead to a happy citizenry. Jefferson knew the best politicians were those who "nature hath endowed with genius and virtue ... without regard to wealth, birth, or other accidental condition of circumstance." Jefferson realized that some of the best minds were not of wealthy or noble lineages, that "indigence of the greater number disabling them from so educating ...those of their children whom nature hath fitly formed and disposed to become useful instruments for the public." As such, Jefferson argued, those most capable of leading the new nation—the best thinkers, regardless of class—should be "sought for and educated at the common expence [sic] of all" (Ibid).

When Congress debated NCLB, a reauthorization of previous educational legislation, the political and social climate was not that much different than when Jefferson introduced his bill. The nation was in the aftereffects of a crisis and was attempting to redefine itself domestically and internationally. However, unlike Jefferson's time, in the twenty-first century politicians and orators did not turn to the schools to help the nation resolve its identity. The purpose of *NCLB*, as stipulated in Title 1, Section 1001, is "to ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging State academic achievement standards and state academic assessments" (Section 1001).

To this end, the Act addressed twelve areas of concern. The first was "ensuring that high-quality academic assessments, accountability systems, teacher preparation and training, curriculum, and instructional materials are aligned with challenging State academic standards." The second two addressed students: targeting "low achieving children" such as "highest-poverty schools, limited English proficient children, migratory children, children with disabilities, Indian children, neglected or delinquent children, and young children in need of reading assistance" in order to close "the achievement gap between high- and low-performing children" (Section 1001).

The following three declarations of purpose focused on accountability via high-quality state assessments, providing alternative education to low-achieving students, and distributing resources to make a difference. The remaining six purposes deal with various aspects of reform: giving "greater decision making authority and flexibility to schools and teachers in exchange for greater responsibility for student performance"; accelerating instruction; promoting school-wide reform using "scientifically based instructional strategies and challenging academic content"; increasing professional development; coordinating with agencies outside the school (arguably the basis for the faith-based initiatives); and increasing parental involvement (Section 1001).

Gone are the ambitious reasoning and global thinking of Jefferson's bill. Gone is the sense of national purpose and prevention of tyranny of Jefferson's vision. Instead of being concerned with a sense of national pride and unity, for better or ill, schools in the modern age need to be concerned with the more practical issues: standards, accountability, teacher training/staff development, and funding. In 1932, George Counts levied a criticism of progressive education that is arguably especially valid of NCLB. Education "must have orientation; it must possess direction. The word itself implies moving forward, and moving forward can have little meaning in the absence of clearly defined purposes." NCLB lacks these purposes; it is creating a system that is "[l]ike a baby shaking a rattle ...utterly content with action, provided it is sufficient vigorous and noisy...our consecration to motion is encouraged and supported in order to keep us out of mischief. At least we know that so long as we thus busy ourselves we shall not incur the serious displeasure of our social elders" (Counts, 1932, p. 4).

Provisions

While the overall purposes were disparate, the provisions of the two were remarkably similar. For example, Jefferson wanted to resist nationalizing schools by establishing a district system keeping the locus of control local. Jefferson knew, as Bailyn would later describe, that nationalized education programs "rose too far above the needs and interests of the scattered, variegated, semi-autonomous communities that comprised the new nation." (Bailyn, 1972, p. 45) As such, Jefferson outlined a plan establishing districts within the state of Virginia.

Each county was to be broken up "into hundreds, bounding the same by water courses, mountains, or limits, to be run or marked, if they think necessary, by the county surveyor." The purpose of these boundaries was to provide districts that "contain[ed] a convenient number of children to

make up a school, and be of such convenient size that all the children within each hundred may daily attend the school to be established therein" (*Bill for the More General Diffusion of Knowledge*, p. 366).

Similarly, the framers of NCLB recognized that education is, ultimately, a local control issue. As such, most provisions of the act make allowances for state and local decisions. For example, Part A of Title I is eleven sections of legislation explaining that states must put together a plan "in consultation with local educational agencies, teachers, principals, pupil services personnel, administrators, other staff, and parents (Section 1111).

While establishing districts to maintain local control over schools, Jefferson's bill contradictorily outlined what can be interpreted as a statewide curriculum. He argued that every school should teach "reading, writing, and common arithmetick [sic]." Jefferson additionally recommended that students read works that would "at the same time make them acquainted with Graecian, Roman, English, and American history" (*Bill for the More General Diffusion of Knowledge*, p. 367). Section XIII of the Bill outlined the curriculum with more specificity: "In these grammar schools shall be taught the Latin and Greek languages, English grammar, geography, and the higher part of numerical arithmetick [sic], to wit, vulgar and decimal fractions, and the extraction of the square and cube roots" (*Bill for the More General Diffusion of Knowledge*, p. 371).

Similarly, NCLB sets some fairly wide, fairly traditional, fairly conservative curriculum parameters. In some respects, NCLB is more specific than Jefferson's Bill, yet in others more general. In at least four titles of the act, curriculum is either explicitly demanded or general criteria set. In Title I, for example, Part B recommends three reading programs—Reading First, Early Reading First, and the William F. Goodling Even Start Family Literacy program.[2] Later Parts within this title specify criteria for programs for Education of Migratory Children; Prevention/Intervention of Neglected, Delinquent, and At-Risk; Advanced Placement Progress; and Dropout Prevention.

Title II of the act sets forth some curricula standards as well. Part B establishes criteria for math and science partnerships, but Part C really becomes specific. Chapter C includes some fairly specific criteria for obtaining funding. Subpart 2 establishes a National Writing Project; Subparts 3 and 4 are easily the most Eurocentric, most traditional of the criteria, in establishing a civics education program (focusing on "We the People" program) and a curriculum, separate from mainstream social studies courses, entitled "Teaching of Traditional American History."

Title III, Part A establishes criteria for "English Language Acquisition, Language Enrichment, and Academic Achievement." However,

Title IV is easily the most proscriptive in terms of curricula. Part D lists several specific programs and curricula for which the act establishes funding, ranging from Subpart 3, "Partners in Character Education," through Reading is Fundamental, gifted/talented, foreign language, physical education, economics, and arts. Not that the programs are too specific or too heavily influenced by the states represented by the authors of the bill, but Subpart 12 provides funding for "Educational, Cultural, Apprenticeships and Exchange Programs for Alaska Natives, Native Hawaiians, and Their Historical Whaling and Trading Partners in Massachusetts."

These sections arguably de-delegate the state's authority in schools. The federal government is not heeding its own advice when it declared, in a 1931 report, that

> [a]ny federal financial support for education in the States shall be given only for education in general and not for special phases of education. Such grants shall not be centrally administered by the Federal Government, but by state, territorial, or other regional governments. (National Advisory Committee on Education, 1936, p. 311)

Curriculum was not the only aspect of education concerned in both pieces of legislation; the practitioners implementing these curricula were of no small concern as well. Jefferson's bill included a provision stipulating administrative and teacher standards, a form of "highly qualified" for the eighteenth century. Reflecting the political purpose to which Jefferson held schools in general, he specified that administrators should be "eminent for his learning, integrity, and fidelity to the commonwealth." It would be their jobs "to appoint a teacher to each school, who shall give assurance of fidelity to the commonwealth" (*Bill for the More General Diffusion of Knowledge*, p. 372).

Just as the purpose of NCLB was not as politicized as Jefferson's purpose, so too is the criteria set for teachers not as politicized. As is the trend, NCLB establishes and redefines the realities of schools, setting very specific, somewhat controversial criteria for the nation's teachers. Accordingly, the act "includes provisions stating that all teachers in core academic areas must be highly qualified in the core academic subjects they teach…The law outlines a list of minimum requirements related to content knowledge and teaching skills that a highly qualified teacher would meet." These core areas include English, reading or language arts, math, science, history, civics and government, geography, economics, the arts, foreign language, special education and teachers of English language learners (United States Department of Education, 2004, p. 9-10).[3]

The Act, however, does not seek to trump the historically significant

local control of schools, nor does it seek to delegate powers. NCLB "recognizes the importance of state and local control of education and therefore provides the opportunity for each state to develop a definition of highly qualified that is consistent with NCLB as well as the unique needs of the state" (United States Department of Education, 2004, p. 10). In other words, the act leaves the states to decide on issues of teacher certification—provided those decisions agree with federal standards.

Once the curriculum is set and qualified practitioners are implementing it, the assessment of student learning begins. Jefferson's bill clearly mandates a system of standardized assessment. Each September the schools would administer a "most diligent and impartial examination and enquiry" of the students in order to determine who were the best performing students intellectually. The stakes of these examinations were nothing less than continuing education: "the best and most promising genius and disposition...to proceed to the grammar school of his district, there to be educated and boarded...and his quota of the expences [sic] of the house together with a compensation to the master or usher for his tuition,...shall be paid" (*Bill for the More General Diffusion of Knowledge*, p. 372). These tests, in Jefferson's vision, were to be administered annually in order to ensure that "the best geniuses will be raked from the rubbish annually"(Conant, 1962, p. 7). Ultimately, the best of each school would be sent to William and Mary, tuition paid.

The burden of accountability represents another major shift from Jefferson's notions to contemporary views. While Jefferson ultimately held students responsible for their educations, NCLB shifts the burden from the students to the schools by establishing specific criteria. Accountability is always lauded in the general public, yet is unpopular amongst educators; the accountability standards established by NCLB are no different.

Section 2141 of the act provides the "clearest" explanation of accountability standards in the act. Essentially NCLB calls for a two-step process of accountability. The first step stipulates:

> After the second year of the plan described in section 1119(a)(2), if a State educational agency determines, based on the reports described in section 1119(b)(1), that a local educational agency in the State has failed to make progress toward meeting the annual measurable objectives described in section 1119(a)(2), for 2 consecutive years, such local educational agency shall develop an improvement plan that will enable the agency to meet such annual measurable objectives and that specifically addresses issues that prevented the agency from meeting such annual measurable objectives. (Section 2141)

The technical assistance plan developed between the state and district is

designed to demonstrate improvement before the following year. If, after that year, accountability standards are still unmet, a more detailed, three-prong technical assistance plan is implemented: first, the state, districts, teachers, and principals collaborate to develop professional development strategies and activities that the teachers would then be required to attend; second, the hiring of paraprofessionals in the district is frozen; and third, staff development funding is taken over by the state (Section 2141).[4]

Unfortunately, this drive to recommend specific curriculum and set accountability standards ignores certain realities of modern schools. Giving schools three years to meet standard and only one year to demonstrate significant improvement is arguably unrealistic. Schools in which students underperform need systemic change, not just a one-year tune up. Reform should begin with children in the primary grades and follow them through the system, taking as many as twelve years to prove effective.

Neither NCLB nor Jefferson recognized the simple fact that the primary factors influencing student performance occur outside schools. It is easy to place the burden of accountability on schools and teachers; it is much more difficult, and far less politically expedient, to admit that until the greater social inequities are eliminated, schools are fighting an uphill battle.

In spite of its purported goals NCLB is not culturally responsive. The National Indian Education Association describes NCLB as being antithetical to American Indian learning styles: "it rewards part-to-whole instead of whole-to-part learning, abstract thought instead of hands-on experience, and linguistic instead of visual teaching strategies." In fact, NCLB is "ineffective and disrespectful of Native culture, a product of putative 'scientific research' that is no more than the established opinion of a small group of non-Indians" (Reynolds).

The learning proscribed by NCLB is not just culturally insensitive, it makes many of the assumptions that Neil Postman and Charles Weingartner cautioned against over thirty-five years ago: there is an absolute fixed truth; that knowing the name implies understanding; that every effect has an easily identified cause; that differences exist only in opposing, good-bad, right-wrong forms; and that knowledge is a given, to be accepted without question. In fact, "it would be difficult to imagine any kind of education less liable to help students to be able to meet a drastically changing future than one which fosters the development of concepts and attitudes such as those noted above" (Postman & Weingartner, 1969, pp. 216 – 217).

Audience—Who's In? Who's Out?

Jefferson's bill and NCLB made theoretical overtures towards egalitarianism; yet in both cases, theory and reality harshly diverged. Jefferson's philosophical notions provided the underpinnings of our democracy. On the surface, Jefferson's bill echoed this notion. Jefferson called for education to be provided for "all the free children, male and female" that were residents within each district (*Bill for the More General Diffusion of Knowledge*, p. 367). However, Jefferson was a man of his age for there existed "an assumption here about the distribution of talent which reflects the homogeneity of the white population" (Conant, 1962, p. 8).

NCLB's egalitarianism is similarly superficial in purpose, but much more exclusive in practice. Two of the primary purposes of the act are "meeting the educational needs of low-achieving children in our Nation's highest-poverty schools, limited English proficient children, migratory children, children with disabilities, Indian children, neglected or delinquent children, and young children in need of reading assistance;" and "closing the achievement gap between high- and low-performing children, especially the achievement gaps between minority and nonminority students, and between disadvantaged children and their more advantaged peers" (Section 1001).

Yet the funding does not support the call. Conservative estimates state that it would cost between $84-148 billion dollars annually to raise the standards just for the educationally disadvantaged in the United States (Mathis, 2003), but the federal government does not come close to these figures. Yes, educational spending has increased by 39% since 2001, and President Bush sought $38.7 billion in his FY 2005 budget (United States Department of Education, 2004, p. 3). This is less than half what it would take to support educationally disadvantaged districts in the nation, let alone all the schools.

Even the populations purportedly aided by NCLB acknowledge the inherent weaknesses of it. In March 2005, the National Indian Education Association announced a sound critique of the bill: "Although the National Indian Education Association supports the broad-based principals (sic) of No Child Left Behind, there is widespread concern about the many obstacles that the NCLB presents to Indian communities." One educator stated that " 'NCLB emphasizes failure' for Indian schools... 'Native American needs are at one end of the continuum, and NCLB exists at the other'" (Reynolds).

Resistance

Both sets of legislation, no matter how noble of purpose, went through excruciating resistance; in fact, Jefferson's bill failed to pass in 1797, 1812, and 1816. Clearly, as described by Bailyn, Jefferson's "famous plan for an elaborate system of public schools in Virginia was wrecked on the shoals of apathy and sectarian opposition and never enacted" (Bailyn, 1972, p. 45). There were a variety of detractors both within the Virginia State Legislature and beyond who opposed the bill on a variety of levels. Jefferson's scheme was

> far too radical an ideal for Jefferson's contemporaries. Indeed, only slowly did the American citizens who paid taxes come to recognize the importance of free schools....The mood of the American people for many generations was inherently hostile to any notion of educating one group of children at public expense for a longer period of time than all the others. (Conant, 1962, p. 7)

Jefferson never tried to take his bill to the national level—philosophically it would have gone against many of the provisions to which he held dear. If Jefferson had attempted some sort of national program mimicking his Bill, however, history tells us he would have found resistance amongst his own party, the Anti-Federalists, for the nationalized scheme and its assumed subversion of states rights. Members of the opposition Federalist party, notes historian Kevin Gannon, viewed policies set forth by Jefferson as being a "subversion of the principles of republicanism" (Gannon, 2001, p. 416).

Unlike Jefferson's bill, NCLB was created with bipartisan political support. Democrats such as Ted Kennedy and John Kerry led congressional support for the original legislation. NCLB is still inspiring bipartisanship; however, as detailed in *The New York Times*, this time the parties are coming together in order to present criticism of the act as "a flawed, convoluted, and unconstitutional education reform effort that has usurped state and local control of public schools" (Dillon, 2005).

At the state level, many state legislatures are resistant to such widespread federal intervention. As of February 2004, reports *USA Today*, lawmakers in 20 states had asked the federal government for changes in the law; two additional states voted to block state funds from being used to implement it; and four more had proposed opt-out measures (Toppo). The Utah State Legislature ignored the direct threat of lost federal funding and overwhelmingly voted in a bill that set state standards above federal requirements (Archibald).

The state of Connecticut is pursuing a lawsuit against NCLB's requirement of testing in grades 4, 6, and 8 in addition to the existing state

testing in grades 3, 5, and 7 (Gillespie). The National Education Association and its state chapters of Michigan, Vermont, Texas, Connecticut, Illinois, Indiana, New Hampshire, Ohio, Pennsylvania, and Utah, partnered with school districts in Michigan, Vermont, and Texas, have also filed a lawsuit against the act. The intent of the lawsuit is not "to frustrate the purpose of No Child Left Behind," but instead to fully fund the provisions of the act that stipulates "no state or school district can be forced to spend its money on expenses the federal government has not covered. The lawsuit accuses the government of shortchanging schools by at least $27 billion, the difference between the amount Congress authorized and what it has spent" (Feller, 2005, p. 6A).

Another line of criticism argues that NCLB imposes too much control over schools at the state and federal level. Contrary to its express purpose of not taking away local control, many critics argue it does the exact opposite by making states follow federal mandates. Although written in 1996, five years before NCLB was passed, Theodore Sizer's criticism of government intervention is applicable. Sizer compares managing a school to sailing a boat:

> There is a chart, there is a planned course, and there are plotted shoals and sandbars, but those on board have to adjust all the time to changing winds and tides, even redrawing the course from time to time. There are goals for a school and a framework of expectations for how those goals may be reached, but the means, and even the framework itself, are subject to constant adjustment on the basis of what is going on with the children, staff, and community. Directing the sailboat from an office ashore is as imprudent as directing the activities of an individual school from a school system's headquarters....The system [of education] is under criticism unprecedented in this century. We hope that the new forms it takes adhere carefully to the convictions represented by Re:Learning's slogan, "*from* the schoolhouse *to* the statehouse. (Sizer, 1996, pp. 102-103)

Indeed, the federal government might be suited to re-read the 1931 Report of the National Advisory Commission on Education. It stated, in part, "It is particularly unwise to centralize in the Federal Government the power of determining the social purposes to be served by educational institutions or of establishing the techniques of educational procedure." The Report cautioned that "[t]he political domination of education by a remote central government, managed by administrative officers far removed from local conditions and sympathies, has always led to the evils of bureaucratic unresponsiveness to local and to changing needs, to bureaucratic standardization, red tape, and delay, and to official insensitiveness to the criticism of far-distant parents and citizens." It concluded

that "[a] decentralized system of management and control of schools is the one absolutely reliable antidote to the easy capture of schools by the propagandists of an economic, social, or political cult" (National Advisory Committee on Education, 1936, pp. 310-311).

Conclusions

Both acts purported to be colorblind, inspired by egalitarianism; both acts were hypocritical, mandating a traditional, Eurocentric curriculum that would perpetuate the high performance of members of the dominant culture at the expense of marginalized cultures. Both acts purported to maintain local control; both acts established governmental curricular and accountability mandates. While many similarities in the educational plans exist, the similarities extend beyond the words on the page. While both Jefferson and President Bush had great theoretical and philosophical respect for systems of public education, neither extended real political capital in achieving these ends. Jefferson failed to act when his political capital was greatest: "the record fails to show that in the days when he exercised great political power he did very much to make his [educational] scheme a reality" (Conant, 1962, p. 12.).

Similarly, President Bush has not placed much political capital into the process of reforming education in the 21st century. In his State of the Union addresses, the President's comments on education never exceeded two paragraphs. A careful reading of his comments reveals that the President sees the primary purpose of education as economic, not political. In 2002, 2004, and 2005, education was only referred to as a means of solving the nation's economic problems. In 2003, education received one sentence in the State of the Union, while nonexistent weapons of mass destruction received sixteen paragraphs.[5]

Jefferson's legacy upon public education in the United States cannot be understated. His rhetoric is easily heard throughout the Common School Era:

> The effects of his ideas and accomplishments in the field of public education are...far reaching. Jefferson's organization of the curriculum was a precursor of the system of free elective offerings. His concept of a system of public elementary education for all citizens was taken over by the American people, who made it compulsory and expanded it to include secondary education for all as well. (Healey, 1962, p. 4)

The ultimate impact of NCLB has, for obvious temporal reasons, yet to be measured. Will it become, in the words of Tyack and Cuban, just another example of educational reform that "may look successful when judged soon after adoption, but in fact they may turn out to be fireflies,

flickering brightly but soon fading" (Tyack & Cuban, 1995, p. 7)? Many states have already approved measures disallowing some, if not all, provisions of NCLB in their states. Colorado, for example, passed a law removing sanctions for schools that fail to meet NCLB's standards that differ from the state's. In addition, Margaret Spellings announced that states that show results along the same principles of NCLB will get much more freedom in testing standards, as well as other reforms of the act's implementation (Dillon).

What then would Jefferson think of NCLB and the administration that created it? An 1813 letter written by Jefferson to John Adams offers contemporary educators a clue. In it, Jefferson explains, the government should be run by, and the schools produce, a class of "natural aristocracy among men. The grounds of this are virtue and talents." Jefferson refers to citizens who come from a background of financial privilege as "Solomon and his Harem" and explains that they are "the accidental aristoi (sic) produced by the fortuitous concourse of breeders." Jefferson explains that this "artificial aristocracy is a mischievous ingredient in government, and provision should be made to prevent its ascendancy" (Lee, 1961, p. 162).

Notes

[1] For more exploration of the relationship between the schools and the nation, see also Kaestle, C.F. (1983). *Pillars of the republic: common schools and American society 1780-1860*. New York: Hill and Wang, 5-12; and Perkinson, H.J. (1991). *The imperfect panacea: American faith in education 1865-1990*. New York: McGraw-Hill, 7-10.

[2] The William F. Goodling Even Start Family Literacy Program takes a holistic approach to improving the literacy of low income families by integrating early childhood education, adult literacy, parenting education, and combined parent/child literacy activities. Within the schools the Program coordinates support services and professional development. The Program uses cooperative projects that coordinate existing community resources with state content standards and benchmarks.

[3] However, teachers of special education and English language learners only need to meet the highly qualified provision if they teach core academic subjects, as previously delineated, to their students.

[4] The freeze on paraprofessionals is not upheld when there is a significant increase in enrollment, or a significant need for translators or coordinators of parental involvement.

[5] Full text of all of the President's State of the Union addresses can be retrieved from http://www.whitehouse.gov. For specific citations for the years mentioned, see sources cited section.

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(Continued from page 64)

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Organizing Curriculum Based upon Constructivism:
What To Teach and What Not To

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Nanyang Technological University, Singapore

Introduction

Knowledge is a personal, inner state of abstraction that is drawn directly through meaning-making of our experiences in real-life situations. Personal interactions with objects of knowledge lead the knowledge seeker to become acquainted or connected with the understanding of facts, concepts, methods, rules and principles through a range of actions such as interpretation, rumination, analytical reasoning and observation. From a pedagogical perspective, knowledge can be construed as the internal state of knowing. It encompasses an intrinsic component that is buttressed by inquiries revolving around the "what," "why," and "how" of the phenomena being studied.

Knowledge in the learning context can be broadly classified into two main categories: *declarative knowledge and procedural knowledge.*

Ontologically *declarative knowledge* relates to the what, where and when aspects of temporal and strategic knowledge domains. It is a static description which captures an insight of the physical world through the medium of words, images, sounds and emotions. For all practical purposes declarative knowledge can be identified with explicit knowledge or knowledge that can be coded and clearly articulated in textual, graphical or verbal structures of representations (Nickols, 2000). Since declarative knowledge deals with the exposition of facts, methods, techniques and practices, it can easily be expressed, recorded and disseminated in the form of artifacts, written norms and verbal communications to become explicit knowledge assets.

Procedural knowledge is related to the procedure to carry an action out. Knowledge about how to do something is procedural knowledge. Procedural knowledge is instruction-oriented. It focuses on how to obtain a result (Turban & Aronson, 1988).

The overview provided of the key concepts of declarative and procedural knowledge forms potentially gives rise to the natural question of how these two categories of knowledge could tie in together organically as the integral components of an educational program. Having worked in reform-minded educational institutions and schools of higher learning that have attempted to frame their curriculum design and instructional practices based upon constructivism as the underpinning epistemology, I have heard questions such as the following making their frequent rounds amongst teaching staff: "How much of content information should I deliver to the students and how much of knowledge should I allow students to actively construct on their own through exploration and experimentation?" "Did I give away too much information in the course of conducting today's class without encouraging learner inquiry and higher order thinking?" "When and how much should I make use of didactic and dialogic instructional strategies in facilitating constructivist-based teaching approaches to foster authentic learning environments in my classes?"

In view of these and similar questions, I hope to outline a theoretical framework in the following sections that intrinsically blends together the pedagogy of the two classes of declarative and procedural knowledge within a learning design that is essentially learner-centric. I wish to highlight that the framework that I have proposed is not a rigid, granular structure that ought to be adhered to and applied in all specific contexts. Rather it is a flexible, generic model that could inform and guide educational practioners in their attempts at developing, organizing and implementing disciplinary curricula anchored upon principles of constructivism. My proposed framework is an adaptation based upon the critical evaluation of the ideas formulated by Nickols (2000) in his heuristics for thinking about knowledge.

An Integrated Framework of Constructivist-Based Curricula Design

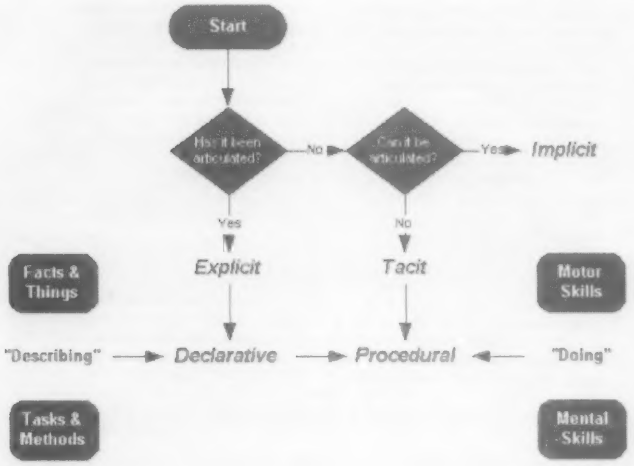
Rationale of Proposed Framework

Nickols has organized his framework from a knowledge management perspective. In this section, I will critically analyze the inherent strengths and drawbacks of his framework from a constructivist pedagogical perspective. Based upon such an understanding, I will then be able to

better direct readers to the description of the key elements of my proposed framework.

The following flowchart encapsulates the principles put forth by Nickols:

Figure 1: Nickols (2000) Framework for Thinking about Knowledge



Nickols explicates in the following paragraph his views on how knowledge can be classified as either declarative or procedural which he equates respectively with explicit and tacit knowledge forms depending upon the context, purpose, orientation and scope of the subject matter under scrutiny. I am in agreement with the following assertion that he made:

> I choose to classify all *descriptions* of knowledge as declarative and reserve procedural for application to situations in which the knowing may be said to be in the doing…declarative knowledge ties to 'describing' and procedural knowledge ties to 'doing'. Thus for my purposes I am able to comfortably view all procedural knowledge as tacit just as all declarative knowledge is explicit. (p. 4)

Further deliberating on the texture of procedural, tacit knowledge, Nickols cites the example Nonaka (1991) presents in his widely acclaimed article of how a product developer, Ikuro Tanaka apprenticed herself to

a hotel chef famous for the quality of his bread and learning how to make bread in the expert's way including an unusual kneading technique.

> Tacit knowledge cannot be articulated. Thus although Nonaka's product developer was clearly able to devise a set of product specifications based on what she learned while apprenticed to the chef in question, it seems doubtful that she articulated the chef's tacit knowledge or her own. It seems more likely that she articulated some rules or principles or descriptions of procedures, that is, she created some declarative knowledge that subsequently proved useful in the design and development of the bread making machine. (p. 6)

Again I concur with Nickols's arguments on the inherently tacit nature of procedural knowledge structures. However his repeated references to knowledge representations, both procedural and declarative being acquired through various modes is an idea that is rather disconcerting and does not sit comfortably with me. One good example of this line of thinking is his following statement "the systematic or facilitated acquisition of knowledge, not simply learning from experience." Such a viewpoint though well-intentioned from a knowledge management perspective seems to be largely ignorant of key learning theories and recent educational research developments and appears to be premised on an information delivery theory of instruction. The information delivery theory of instruction argues that teaching predominantly consists of dissemination of loads of information with learning constituting of mechanically acquiring such information through memorization and recalling.

Pedagogically how viable and justified is such an assertion? Clark and Mayer (2003) counter that the information delivery theory is based on an incorrect conception of how learning occurs. It erroneously assumes that the minds of learners are empty vessels which can be filled with unlimited amounts of information mimicking the modes of operational functioning of computers. Such a hypothesis fails to take into account the scientific processes of active meaning-making, cognitive modeling and construction of mental schemas embodied in intentional learning that proponents of constructivism champion. The use of the word *acquisition* connotes a passive style of learning disposition where the learner absorbs huge chunks of information and participates in an educational initiative in which the instructor predefines and drives the attainment of instructional objectives that are usually divorced from the realities of learners' previous experiences.

Educational theorists such as Dewey (1937/1997) have criticized such limited notions of learning as being fallacious, resulting in miseducative experiences. According to Dewey a positive educative experience "arouses curiosity, strengthens initiatives, sets up desires and purposes that are

sufficiently intense to carry a person over a dead place in the future" (p. 38). Dewey's principle of continuity of experience calls for learning to be a continuous process of reconstructing experiences. On the other hand a miseducative experience "has the effect of arresting or distorting the growth of further experience" (p. 25). The principle of continuity posits that "every experience both takes up something from those which have gone before and modifies in some way the quality of those which come after " (p. 35). The prior experiences of learners need to be the starting point in organizing an instructional curriculum that is both robust and engaging. This ensures that with the progression of instruction, the current scope of these experiences widen and coalesce into fuller, richer and thicker forms.

In defining the subject matter for a curriculum that incorporates learners' prior knowledge and situates learning within the formation of a continuum of generative experiences, what should be the epistemological order of declarative and procedural knowledge representations? What instructional strategies could be effectively adopted to strategically enforce such a progressive order to achieve learning outcomes rooted in the precepts of constructivism? Most existing models of skill learning are top-down (Sun & Peterson, 1997, 1998) with the underlying assumption being that individuals learn generic, verbal, declarative knowledge first and then through practice, turn such knowledge into specific, usable procedural skill (Anderson, 1983, 1993; Ackerman, 1988). Some experts (Anderson & Fincham, 1994) believe otherwise in that some procedural skills develop prior to the learning of declarative knowledge, with explicit, declarative knowledge being constructed only after the skill is at least partially developed.

I personally am of the opinion that some low-level skills domains permit the bottom-up approach to learning where procedural knowledge is learned and then declarative knowledge expressed. On the other hand, development of most other skills, especially those that are cognitively complex and structurally interdisciplinary such as in the physical sciences and computer programming, require the learning of declarative knowledge prior to the construction of procedural knowledge. This enables one to perform the complicated task with no access to the declarative knowledge and without conscious awareness of the specific details and intricacies involved. The underlying logic is that initial foundation declarative knowledge facilitates the transfer of skills, speeds up the learning process in new settings and enables the communication of knowledge and skills to others (Willingham, Nissen, Bullemer, 1989; Sun & Peterson, 1998). Declarative knowledge lays the knowledge foundation in place which when acted upon subsequently through

situated practice becomes converted to tacit, procedural forms (Anderson, 1982). This transition happens in gradual, concurrent ways through continuous experiential learning. When actualized and internalized, the learner is able to automatically perform the actions of the task though he/she is unable to analytically nor heuristically communicate the whys and hows of carrying out the procedures within the task. Such preliminary, prerequisite declarative knowledge could be activated within learners if they have the prior knowledge or otherwise it needs to be communicated to them before they attempt to learn new procedural knowledge.

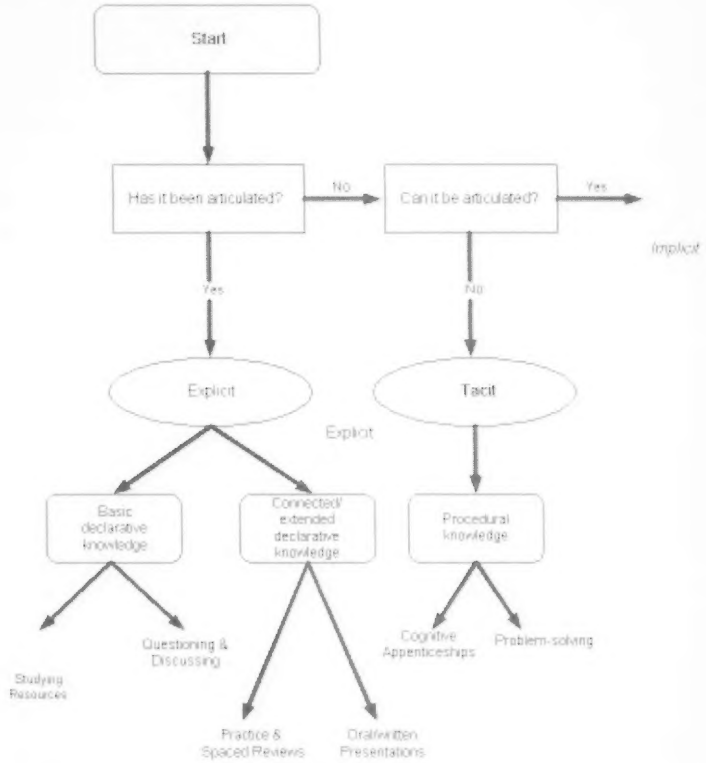
Description of Knowledge Components of Proposed Framework

In the knowledge taxonomy of my framework, I have chosen to classify declarative knowledge into two broad, functional forms i.e. basic and connected/extended factual knowledge. When verbal information which is originally in an abstract form gains a meaningful representation as organized bodies of knowledge, it becomes transformed into usable, declarative knowledge.

In my taxonomy, for most working purposes the order of instructional sequencing is organized such that declarative knowledge in its basic form is acquired first by learners followed by learning of connected/extended declarative knowledge. Both of these categories of knowledge lay the epistemological groundwork for learners to interact with the objects of declarative knowledge through a range of learning activities and instructional tasks to then learn the intrinsic, procedural knowledge of processes and skills. In my model, procedural knowledge also subsumes systemic knowledge where the learner is aware of the dynamics of the relationships governing the different component and sub-component parts that constitute the learning system.

Basic declarative knowledge constitutes verbal or written statements that express relations between two or more named objects or events and details about their properties (Gagne, Wager, Golas & Keller, 2003). Such information could also be details on episodes, cause/effect sequences, time sequences or general principles. Examples of such statements in science include "Plants are usually green in color," "Length is defined as the physical distance between two points," "Boiling point is defined as the temperature at which a liquid turns from a liquid state to a gaseous state." In history, basic declarative knowledge statements could be the following: "President Kennedy was assassinated on November 22, 1963" and "The war was lost due to lack of logistical planning." Such statements convey meanings that could be related to other existing facts and integrated to build-up a larger set of

Figure 2: Integrated Framework of Constructivist-based Curricula Design



knowledge or extended to learn new facts. I call this second category of knowledge as connected/extended declarative knowledge in recognition of the fact that such knowledge is a natural expansion of basic declarative knowledge and which when acted upon to execute a set of actions, involving either mental or motor skills becomes transformed to procedural knowledge. Connected/extended knowledge includes the learning of a variety of concepts, rules and principles to gain intellectual processing capabilities. For example when the concept of length is understood in mathematics, it could be logically extended in its usage to understand Pythagoras Theorem and its associated application. In science the basic principle of boiling point could be further extended to

explore how various environmental variables could alter the boiling point of a liquid.

The maturation of the learning process results in the development of vital procedural knowledge or knowledge in the doing. Encompassing psychomotor and cognitive components, procedural knowledge is inherently functional enabling performance of varied tasks. Such procedural knowledge is the consummation of declarative knowledge which originally being descriptive is now employed to execute a set of actions to accomplish a task. Such tasks include psychomotor activities such as diagnosis, troubleshooting and repairing of mechanical systems as well as cognitive activities such as learning a foreign language. The skills and processes embodied in the learning of procedural knowledge are in essence intrinsic and complex that the expert is able to enforce the course of action and the corollary procedures of the task intuitively and sub-consciously that he/she is unable to communicate explicitly to others the functional mechanisms of procedural knowledge. I concur with Nickols (2000) in his conclusions that though some knowledge theorists are of the opinion that the outputs of procedural knowledge could be represented as heuristics, alogrithms or instructional/flow charts in actuality such explicit descriptions of acts could only be termed as implicit knowledge and not procedural knowledge. To quote Nickols, "a description of an act is not the act just as the map is not territory" (p. 4). An example that I could put forward to emphasize the point that procedural knowledge is innately tacit and resides in an internalized structure of cognitive existence is the case of an expert troubleshooter who is able to analyze a malfunctioning air-conditioning system for its fault state configuration and repair it accordingly. *Though he / she may be able to present a procedural manual to guide novices step-by-step, the techniques of how they could on their own perform the troubleshooting task in a systematic manner.*?? However, such explicit specifications could hardly be considered as the fitting match or representation of the entire body of tacit knowledge held by the troubleshooter. The expert troubleshooter's base of procedural knowledge could be rich and vast, having been collected from previous working experiences that he/she may intuitively depart from the natural order of course of action expressed in the original set of guidelines at a certain juncture of the troubleshooting process to ensure a more rapid and efficient completion of the task. The same could be said of an expert doctor who would not be able to fully express in words his/her consolidated tacit medical expertise on the procedures of detecting various ailments and prescribing cures for them. All that the expert doctor could do is to articulate in a limited way some generic recommendations of how beginner doctors could handle the diagnosis of their patients. Such recommendations at best can be categorized as declarative knowledge.

Scaffolding Instructional Strategies

In this section I will explain the embedded instructional strategies and processes in my proposed framework that support the formation of basic declarative, extended declarative and procedural knowledge formats. Generally a constructivist learning environment is structured to allow the learner to autonomously construct systems of meanings based upon prior knowledge and educative experiences both at an individual level as well as a social level. Dewey (1916/1966b) reasoned that the act of knowing is not an external, independent process and thus logically speaking knowledge cannot be taught since the notion of learning is not constrained to the learning of "true" ideas such as facts and principles but rather the concept of formulating conceptual understandings through generative human experiences. Dewey further argued that "there is no mistake more common in schools than ignoring the self-propelling power of an idea" (1933/1986, p. 341). It is essential that reflective learning activities, as Dewey labeled them, be integrated within curriculum to serve as stimuli in linking the subject matter to be learnt to the experiential world of the learner through the rigors of self-inquiry. This allows the learner to generate and organize new ideas in a spiral manner where the learner seeks out and manipulates information to construct their own meanings out of the array of learning sensations. Such an instructional model facilitates incremental learning where the learner continuously builds new ideas and concepts upon existing mental models or schemas. Gagne, Wager, Golas and Keller (2003) suggest that the mental models or networks of propositions that encompass newly constructed knowledge be linked to larger propositional networks that already exist in memory. For example the instructional units for a history lesson can be organized with students first learning the framework of a historical timeline of key world events which can serve as the frame of reference into which students can actively insert details of each event later on with the progression of the lesson.

I am of the opinion that autonomous knowledge construction is more appropriate for learning connected/extended declarative knowledge and procedural knowledge than for acquiring basic declarative knowledge. Basic declarative knowledge being elementary in its scope does not require a high level of cognitive processing nor analytical reasoning for comprehension and thus there is not much scope for learner-driven construction of meanings. In fact adopting a constructivist epistemology to acquaint learners with fundamental information and ideas could prove to be counter-productive and might unnecessarily complicate the learning process. I believe that an information acquisition mode would suffice in the learning of facts and principles that constitute basic declarative

knowledge since the complexity of understanding at this phase is of a rudimentary level. If the basic declarative knowledge needed for the lesson has been learnt before, this prior knowledge can be activated through techniques such as questioning and recalling. Otherwise learners could be encouraged to acquire the new, prerequisite basic declarative knowledge concepts through reading of a variety of resources. For learners who are unfamiliar with the subject matter or are at a lower level of intellectual development, these resources could be provided for by the educators whilst learners who are cognitively better equipped and are capable of directing their own learning could be encouraged to seek out their own resources. However at the end of the stipulated reading period of resources, it is important that educators thoroughly discuss with learners the basic declarative knowledge precepts and explicitly teach them if need be.

Extended/connected declarative knowledge could be learnt through instructional strategies where the teachers plays the role of facilitators, enabling learners' active construction of new knowledge through modes of self-discovery and experimentation that increase learners' ability to grasp, transform and transfer content being learnt. One such strategy is affording opportunities for varied practice and spaced reviews. Traditional practice sessions and spaced reviews are essentially of a drill and practice nature where learning is emphasized through remembering, repetition and recalling information in isolated or unrelated contexts to retrieve acquired information from memory. However a constructivist approach to practice and spaced reviews involves task-oriented learning activities where learners are exposed to an array of cognitive processes involving comprehending, applying, creating, elaborating, managing, critiquing and cross-referencing the body of prerequisite basic declarative knowledge to build up new extended/connected knowledge structures. A key component of these activities could be the requirement for learners to either verbally or in writing explain the rationale of their thought processes while constructing knowledge schemas. These oral or written descriptions could serve as "think-aloud" protocols and enable facilitators to ascertain students' intellectual development and highlight to learners the necessity to be aware of metacognitive strategies. Metacognition being an internal processing act makes use of and governs a system of cognitive strategies to monitor, regulate and control learning and memory processes (Flavell, 1979). For example, a lesson on Pythagoras Theorem could be designed based upon task-specific practice activities which tease out students' understanding and learning in structured ways. Firstly, the facilitator activates students' prior basic knowledge of the definitions of length and other related information such as units of

measurements and how lengths can be measured. If such foundation knowledge is found lacking in the students, the facilitator explicitly needs to teach such content at the onset of the lesson. Following this, students could be allocated some "hands-on" time to apply the basic knowledge by manipulating a variety of triangles of different sizes and measuring the lengths of the sides of the triangles. In the course of students working on the task, facilitators could provide verbal cues to prompt students to probe and reflect deeper the relationships between the lengths of the sides of the triangle. Students are thus progressively guided to draw their own inferences from their personal learning experiences to gradually come to understand the principle of Pythagoras Theorem.

Procedural knowledge as I have argued for earlier is inherently tacit and resides in the minds of the experts. Thus it cannot be transferred through articulation or communication from the experts to novice learners. However constructivist curriculum designers could employ some instructional methods for facilitating learners' construction of procedural knowledge. Planning for cognitive apprenticeship is one such method (Gagne, Wager, Golas, & Keller, 2003). Historically, apprenticeships are learning situations where the learner works alongside the experienced individual. This instructional technique includes observation, coaching, practice and feedback to the learner. Cognitive apprenticeships do not imply the exact transfer of mental models from the expert to the novice since such a transfer is not plausible. Rather through keen observation and constant feedback from the expert, the novice learner develops an in-depth conceptual understanding of issues being studied and in the process develops his/her own mental networks of propositions that make up the new procedural knowledge. Collins, Brown & Newman (1989, p. 459) posit that "cognitive apprenticeship, as we envision it, differs from traditional apprenticeship in that the tasks and problems are chosen to illustrate the power of certain techniques or methods, to give students practice in applying these methods in diverse settings, and to increase the complexity of tasks slowly, so that component skills and models can be integrated."

Yet another instructional strategy that could be effectively employed by educators to facilitate tacit, procedural knowledge construction is through problem-solving. Problem solving is a highly dynamic and multi-faceted learning activity that is embedded with context-rich, experience-based problems. Problem solving tasks are normally student-centric and situated based upon a typology of variegated problems that reflect the complexities of real-world situations. The problems could also differ in their demands for the levels of cognitive processing and higher-order thinking required in solving the given problems. The problems could

range in a continuum from being well-structured to being ill-structured. During the process of tackling the problems, the students develop an internal repertoire of intellectual skills. Some of these skills include mental representation of the problem structure, construction and manipulation of the cognitive space around these problems, building schemas of conceptual understanding and invoking an array of problem solving strategies (Jonassen, 1998, 2000). Recognizing and actively solving an assortment of problem states allows students to imbibe highly tacit, procedural knowledge which can then be applied or transferred to other similar problem situations.

Conclusion

In efforts at encouraging reflective teaching practices amongst educators and transformational learning amongst learners, many schools and tertiary institutions are encouraging the design and implementation of constructivist-based curriculum models. Constructivism exposes learners to the richness and rigors of objective reasoning, self-inquiry and critical-openness which improves their scholarship and analytical skills. However this does not mean that learners are to be left in the deep end to fend for themselves in their pursuit of gathering knowledge. Rather, in this article I have attempted to explicate a model that integrates the pedagogical orientations of both declarative and procedural knowledge structures. In such a model, educators as facilitators need to be cognizant of the both the diverse cognitive demands of different disciplinary subject content and the epistemological attributes of declarative and procedural knowledge representations. Such an approach has the potential to formulate and organize curriculum content that is meaningful as well as stimulating to learners. Consequently educators need to harness appropriate mediating instructional tools and techniques to progressively guide learners at actively constructing new knowledge schemas through a continuum of generative learning experiences.

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A Destructive Dialectic:
The Menace of Egalitarianism and Self-esteem

Gregory K. Stanley
Calhoun High School

> Vital segments of our education system have fallen into the hands of people who joyfully and militantly proclaim their hostility to intellect and their eagerness to identify with children who show the least intellectual promise
>
> —Richard Hofstadter, *Anti-Intellectualism and American Life*[1]

Introduction

It would seem that in today's society, everyone is a minority of some kind who has been cheated out of a fundamental right. This editorial pleads on behalf of an entire group of students that has been cheated the most by public schools. Sadly, this group of deserving students has been irreparably harmed by trendy methodologies, inequitable funding, and callous disregard for its true potential. This one group has been tossed onto the scrap heap of public education. It makes up twenty percent of the total dropout rate. Half of this group does not fulfill its potential. The landmark report, *Nation at Risk*, issued an early warning concerning this group but educational theorists turned a deaf ear and, in fact, have worked to harm it more.[2] Our democracy promises that each person, regardless of racial, cultural, or economic background should have the opportunity to develop as far as that person's talents and motivation will permit. Yet today, tens of thousands of students from this one group are being shortchanged by public schools. Not only does public education cripple the learning experience for this group, but many educators celebrate their harmful actions. I speak here, of course, of the nation's most gifted students.

Where We Are?

There are two forces (old, but recently mutated) at work today that are destroying classroom instruction like some flesh-eating bacteria. They are inextricably tied together and for a generation have attacked all students, especially targeting gifted ones. They are the out-of-control self-esteem movement and the much older (but newly skewed) concept of egalitarianism.

A colleague brought his cute two-year-old daughter by one day after school while his wife went to the dentist. She sat on the floor and busied herself playing with a cup of brightly colored paper clips. Every time she handed her father a clip, he responded by saying sweetly, "Thank you." He thanked her when she threw the paper clips onto the floor. He thanked her when she threw them into the wastebasket or under desks. He showered her with praise when the clip landed behind the bookcase. It dawned on me then that teachers treat their students in much the same way. For a generation the sole purpose of our curriculum has been to encourage students to feel better about themselves. Yet missing from this strategy is the very idea that students should actually accomplish something for which to be praised. This mantra of "praise irrespective of quality" is routinely repeated as though students existed in some kind of perpetual pre-toddler stage where every form of progress—walking, babbling, jumping—seems miraculous.

As Richard Sacks described in his *Generation X Goes to College*, instead of demanding the sort of excellence students will need to really succeed in the world, teachers have responded "by making achievement easier and easier, hoping that lots of As and Bs might help young people feel better about themselves and thus propel them toward excellence."[3] Such a practice not only puts the cart way before the horse, it removes the horse from the entire equation. Praising students, or rewarding them with gold stars or high grades regardless of their performance does not build self-esteem. That is the sham that has been perpetuated by some vocal educational theorists. Quite the contrary, the result is narcissism and empty self-congratulation which destroys all respect for true accomplishment.

The most sinister force undermining education programs is the re-emergence of the old concept of egalitarianism. This movement cannot be separated from the self-esteem fad because egalitarians are frequently the most vocal champions of no-achievement self-esteem. But in current practice, egalitarianism has been twisted around to mean that all students should receive the same education. States have spent millions of dollars determining baseline competencies, and *tracking* has become a dirty word. Pulitzer-winning *Time* writer, William A. Henry III, describes in horror the learning environment of one prosperous New

York City suburb. That school has adopted a single curriculum for all students. It has leveled the entire student body. Each class must be carefully balanced for race, gender, *and* ability. The English department chair defends the practice on the grounds that a truly democratic society should not make any distinctions.[4]

In order to protect their self-esteem, students today must be shielded from the realization that they lack any real achievements. It follows logically, therefore, that they must be shielded from the students, who by virtue of their own intelligence and motivation, achieve the most. As a result, gifted students and their teachers have become targets of revilement. For example, a friend teaches at a middle school where the honors program is under attack. The new principal has stated that all school activities must be open to all students or else it will harm their self-esteem. Yet, he reasons further, that if all students were put into honors, their lack of progress would similarly harm their self-esteem. If students must be shielded from the reality that some students are better, then the only logical solution is to abolish all honors classes.

I recently bumped into an elementary teacher in a long polling line. When she learned that I taught in the high school's International Baccalaureate honors program, she snapped back, "It's so unfair to have special classes for one small group of students." Clearly, the one-size-fits-all approach has become the *sine qua non* of American public schools. Moreover, the trend is becoming even more repressive and schools are abandoning gifted programs under the misguided notion that they are undemocratic. It seems tragically odd that the greatest push for such a curriculum leveling comes from *inside* education. Parents do not stand up at school board meetings and demand that their children be taken out of honors programs to foster equality among the student body. As schools become less focused on academics and more on socialization, teacher-educators, administrators, and teachers are leading this campaign. In the words of the famous *Pogo* cartoon strip, "We have met the enemy and he is us."

In this regard, there is clearly a disharmony between the public and educational theorists. Writing in *Education Week*, J.E. Stone describes a "staggering disconnection" between the educational aims of parents on one hand, and those of the professors who train teachers. "The public," he writes, "wants schools with orderly classrooms that produce mastery of conventional knowledge." Teacher-educators, however, consider the public's expectations to be outmoded and mistaken. He blames this disharmony on the quasi-monopolistic nature of teacher certification and the "regulatory capture" of education by licensing agencies and education schools that are not responsive to the demands of the public.[5]

The obsession with anti-elitism so prevalent in schools is not so readily apparent in other sectors of American society. We support excellence in athletics. When we cheer at a ballgame, we do not consider the unfairness of one athlete being taller or faster than the average person. Americans also support excellence in our professions. We like to know, for example, that the surgeon that is going to cut our chests open has had the finest preparation available. Only in the American public schools is the quest for homogenized mediocrity valued over excellence.

Will the Real Elitists Please Stand Up?

Many advocates of gifted education describe the situation today as "a quiet crisis."[6] The needs of gifted students are silenced by some educational theorists, many of whom are too long on theory and embarrassingly short on actual teaching experience. The desires of parents are silenced as well. No education researcher has demonstrated that tracking or ability grouping has had any adverse impact on the student body. Yet a few theorists can control education without challenge. They are insulated from criticism and from the tiresome need to verify their romantic, ideological, or dogmatic theories.

The reactions of parents of gifted students make this truly a quiet crisis in public education. Wealthier parents often simply remove themselves from the argument by transferring their children to private schools. Parents who are not so financially blessed have no recourse. They have no voice or leverage in the situation. In deploring ability grouping as elitist, some educational theorists have truly become non-egalitarian themselves. They are depriving poorer students of the opportunity to fulfill their potential. Yet still, these educators do so in the name of democracy. In silencing a powerless group, have not these theorists become true elitists? They are using their positions of monopolistic privilege to impose their will on a disenfranchised group.

How We Got Here, or Everything Old Is New Again

Philosopher George Santayana gave us one of the most over-used and misused maxims when he stated that people who do not remember the past are doomed to repeat it. Yet in this context, it is clear that some educational theorists who have never learned the history of their own discipline are prone to think that their theories are original. Actually, many of our recent wonder-strategies are little more than restatements of century-old theories. Even the recent self-esteem epidemic is only a rehash of old theories. In 1915, for example, John and Evelyn Dewey

wrote in praise of the experimental schools they had seen in Fairhope, Alabama. There, students were not subjected to tests or grades. No student failed to win promotion. That was a good thing, the Deweys wrote, because real success should be measured not by the amount of subject learned, but by the joy of the work itself.[7]

Shielding students from failure and, more regrettably, from observing the excellence of other students, is likewise an old and unproven notion. In 1929 Progressive Education Association founder, Marietta Johnson, proclaimed that no child should ever know failure. Schools, she urged, "should *meet* the demands of the nature of childhood, not make demands. Any school system in which one child may fail while another succeeds is unjust, undemocratic, and uneducational."[8]

Likewise, this "new" focus on the "lower-middle" began more than a century ago. In 1900, the National Education Association stated that there was a time when "the power of the teacher was measured by what he could do with a bright boy or a bright girl." The NEA was proud to proclaim that such a day was blessedly over. To mark the beginning of the new century, teaching skill would be measured by what teachers could do with "the dull boy, the defective child."[9]

New Momentum for Old Ideas

Today, changes in school functions and priorities have not only revived but added ferocious power to the old concepts of self-esteem and egalitarianism. Over the past generation, our schools have become the focal point for everything, it seems, except education. From condom distribution to anger management counseling, schools are spending more and more time dealing with social problems instead of basic education. As William Henry so aptly described, the new role of the public school is as the national nanny, providing everything from free lunches to day care. It is not that these new programs are, in themselves, wrong. But this new scholastic function has tragically bred in many teachers and administrators the sense that their primary mission is to succor the young rather than to instruct them.[10] Schools are now obsessed with building self-esteem at the expense of self-fulfillment, challenge, or achievement.

The current craze for school accountability and high stakes testing has also added momentum to these changes in school function. As our schools have morphed into test prep centers, gifted education is under even greater attack. Gifted students are largely moot in this pursuit. They can already pass the various graduation and promotion tests without any special instruction. With so much attention now paid to bringing up the most mediocre students to minimum standards, schools

have not only lost sight of excellence as a desired objective, but now have denounced it as unfair. Schools were once concerned with providing equal opportunities to learn. Now they are mandating the idea that there must be an equality of results. Not only have they foolishly proclaimed that everyone is pretty much the same, but they are demanding that all students must be. In a culture obsessed with minimum competency, excellence is an embarrassing reminder that we are not all the same. This condition offends the nurturing instincts of many educators and they have determined to eradicate these differences on the grounds that they are bad for the self-esteem of those in the lower-middle.

Recently revived instructional theories have also aggravated the tendency of some teachers to deplore talent as not egalitarian. The evolution of instructional delivery—especially the demotion of the teacher from sage to "guide on the side" and the proliferation of cooperative learning strategies—have enervated the learning environment for the gifted. Teachers more concerned with socialization than with learning insist that the mean is more important than the individual score. The dominant teaching strategy has been to teach to the lower-middle. In this way, below average students learn at a target pace while advanced learners become tutors for the slower learners in the group. This helper methodology has become so widespread in public schools that it is now virtually ubiquitous.

This theory neatly embraces a Neo-Marxian belief that the gifted students' intelligence is not theirs alone to develop, but instead a communal asset to be used for the good of the whole class.[11] This theory also dovetails neatly into the current obsession for standardized testing. In the quest to boost the mediocre students, giftedness is now reviled as unfair and not serving the higher needs of the community. At a recent workshop, I heard a speaker claim that schools could easily boost their graduation test scores by abandoning honors programs. By spreading the best students around, they would pull the other students up. Defenders of the student-as-tutor model say that having bright students serve as peer tutors validates the group experience and builds leadership skills. Another teacher offered a similar solution. She recommended that schools drop honors courses so the honors *teachers* could be spread around. She reasoned that in order for standardized test scores to rise, the best teachers must teach the worst students. After all, she concluded, anyone can teach honor students because they essentially teach themselves. They will have no problem passing the graduation tests. This speaker obviously does not believe that the purpose of school is to allow students to develop to their full potential. Reaching minimum competency is the only goal.

But do we develop intellect and talent by aiming so low? Do we really produce future Edisons or Einsteins by forcing them to spend their school

day tutoring students who may not have any interest in learning? One veteran teacher told me, "The idea that the good student will pull everyone else up in a cooperative setting is an evil lie. Instead, what happens is that the good student ends up doing the other students' work." Intellectual development for gifted students should not be bartered away so teachers can have a cadre of unpaid tutors at their disposal. Teaching to the lower middle simply does not provide the level of challenge needed by gifted students. As a result, the smartest students are often unproductive and bored. Stephanie Tolan compared under-challenged gifted students to cheetahs. A cheetah running forty miles per hour might be impressive to some observers looking for minimum competency, but it is drastically underachieving in relation to its true potential. Similarly, if a cheetah only has to chase after rabbits that run 20 m.p.h., it will never run 70 m.p.h.[12]

Results: The Bane of Entitlement

We have coddled our students for so long in the name of entitlement that they have lost all respect for (or even awareness of) achievements that come through long and hard labor. A generation ago, people felt entitled to a *chance* at education. Now many students believe that they are entitled to academic credentials without the bothersome tasks of demonstrating mastery. From grade school through high school, teachers shower them with gold stars, promotions, grades, and even diplomas regardless of their performance. I spent a bit more than a decade teaching at the university level and have learned to loathe the first day of the semester. Invariably, there were always a number of students who wanted to see me at the end of the first class. They casually announced that they were pre-law (or pre-med, or pre-something else) and needed an A in the course. They were ordering grades with the same casual air that they would order fast food. I wondered where they developed the attitude that they were entitled to automatic grades without first proving their abilities.

When I started teaching at the high school level, I found out. Working as a substitute teacher one day I spotted a very bright student furiously writing down nonsense answers on a calculus quiz. She turned the quiz in and then started in with equal fury on an English assignment. I asked, "Why did you only scribble down random answers?' She replied, "My English is due next period. Besides, Coach never grades these. He give us all 100s if we write something in each blank." Incredulous, I laughed, "He wouldn't do that. This is an honors class." The student then pulled a dozen or so old quizzes out of her notebook to show me: all 100s—and there wasn't a correct answer in sight.

At the same school I watched as another top student stapled three

pages of an old English paper inside a five-page history paper for filler. The student explained, "It's okay, Mrs. K. only reads the first and last paragraphs anyway." The smirking student brought the paper by a week later with a bright red A on it. The students referred to their school as B-Mart. Everyone received a grade no lower than a B.[13] If teachers had the audacity to give lower grades, they were in for an unpleasant conference with the principal. Students, especially seniors, catch on to the unofficial rules of this game. I have had numerous teaching colleagues tell horror stories of students who slept through entire semesters and either failed tests, or didn't even bother taking them. But they were passed on or graduated anyway. Not to do so, would have had drastic effects on their self-esteem.

Students nurtured in this artificial environment leave high school and crash headlong into a harsh reality. They encounter bosses who care more for productivity than for the self-esteem of their employees. Or, they charge off to college and encounter professors who actually grade their papers. The students then learn that these teachers have high expectations. They learn that standards are not negotiable. They learn that there will be no last-minute reprieve from a grade-changing principal. It's just that they learn these lessons too late. Standing in a slow-moving Add-Drop line is the wrong place for such an epiphany.

Results: Gifted Students in Camouflage

The self-esteem and egalitarian movements have had especially disastrous effects on gifted students. In a culture that does not celebrate talent, where relatively few benefits and additional, inglorious responsibilities seem to accrue to those identified as gifted, many students have opted for invisibility. In non-differentiated classes, gifted students frequently become such experts at camouflage and concealment that the snipers at Ft. Benning would appreciate their skills. As a former student explained:

> My chemistry teacher gave us ridiculously easy problems to do. But if I finished before the other students did, she got mad and gave me more of the same. If I didn't get finished with them, I got a zero. It was boring and frustrating. I hated going to class. Being a gifted student in a mixed class like that is like going to a restaurant. The waiter comes out and says, 'Excuse me, but we burned your food. So, to make up for it, we're going to give you extra portions.

Once a student is identified as gifted, he/she may suffer barbs from less talented classmates. Contrary to what the supporters of new teaching theories contend, some oppositional adolescents may not greet help from an intellectually-gifted peer with enthusiasm. In such a setting, gifted learners may see their intelligence as a stigma rather than an asset

and act to camouflage their abilities. This is hardly a formula for intellectual development.

In talking with gifted students I am always impressed at the sheer number of stories they recount in which they have been bashed in the non-differentiated classroom. Many students stated that they most dreaded the moment when the teacher passes back graded exams. In classes where teachers grade on a curve, gifted students always break the curve for the rest of the students. Some gifted students indicated that they purposely marked a few incorrect answers to escape the animosity of their classmates. Many students reported that they do not participate in class discussions any more. Frequently, other underachieving students ridiculed them for their eagerness to learn and for their intellect. Underachieving students frequently hurled insults such as, "God, what a dork!" or the sarcastic, "Way to go, brain."

I am continually amazed and appalled that some teachers (especially in high schools) allow these attacks to persist. A student described recently that in her middle school English class, she kept waiting for the other students to turn on her like the sled dogs in a Jack London novel. Moreover, many students indicated that they did not ask questions in class because it upset the teachers so much if they can't answer the question. In the words of one student, "I don't think any of my teachers actually like me. I've just stopped talking in class. My mother told me that was the easiest and safest thing to do." Such silent and passive resignation does nothing to build intellect in our gifted students.

The tendency to hide intellectual talent is especially prevalent in males. Many gifted boys start their academic underachievement earlier than gifted girls.[14] In a school environment that prizes athletic achievement, where schools hire coaches regardless of their academic backgrounds, is it any wonder that many of the smartest male students hide their talents to avoid being labeled as geeks, nerds, or sissies?

I secretly applauded the decision of one outstanding student on this point. He played football during his ninth grade year even though he really didn't like the sport much. Yet he was an easy target for the coaching staff. Even at age fifteen, he was over six feet tall and tipped the scales at well over two hundred pounds. With the support of his parents, he finished his scholastic career on the academic bowl team. It was not a popular decision among the coaches or other players. He suffered more than his share of barbs from classmates that questioned his manhood. He did very well in the International Baccalaureate program and is now an honors student at a major university. Too many of our male students lack role models to make a similar decision. At many schools in that student's area, all of the Advanced Placement teachers were women. All of the men coached.

Given the number of men who serve as coaches, it is possible for students in many districts to go through twelve years of school without encountering a male teacher who is certified in his field.[15] This reality creates an atmosphere that absorbs too many of the best male students. A strong and oppressive culture has arisen which denounces academic excellence on the part of male students as an undesirable and unmanly trait.

Results: Leveling the Playing Field

I used to think that athletics was the last bastion of excellence in public schools. After all, we don't insist that the coach of the state champion team coach to the middle. We don't insist that the starting quarterback be put with the third team so he could tutor them while the coach facilitates from the sidelines. Star athletes do not intentionally miss dunks to avoid the envious barbs of their classmates. Theorists do not insist that all players should have equal time at quarterback while simultaneously demanding that there were not right or wrong results.[16]

Or, perhaps those values are changing, too. A 1993 *New York Times* article described the new theory of non-competition. Under this new philosophy, games must not be scored and running must not be timed. Basketball goals should be adjusted in height and distance for each player. Proponents loudly proclaim that we must not test children against set standards because such a system would harm fragile self-esteem.[17]

Forty years ago, President Kennedy urged the establishment of a President's Physical Fitness program to reward students for excellence and achievement in personal fitness. Students who met the criteria wore their blue President's Council patches proudly. Now teachers are determined to shelter students from the damaging revelation that athletic talent is not evenly distributed in a population. In many ways, this new approach to athletics is just the next step in mandating uniformity—the logical extension of classroom principles. If students' self-esteem would be harmed by learning that some children do better in class, it is only logical that they must be shielded from the same reality in sports. The playing field is the most undemocratic area in public schools. If teachers level the classroom, they must, therefore, level the playing fields as well. If excellence and achievement are not to be celebrated in class, then they must not be permitted in sports. A century ago, Theodore Roosevelt advocated the strenuous life as a means of proving individual and national character. I am sure that he would be outraged at this skewed concept of democracy being foisted upon our school children today. Unfortunately, no one has taken the "bully pulpit" to denounce our loss of faith in excellence and the resulting celebration of mediocrity as an egalitarian goal.

What Can and Must Be Done

Schools must realize that they are only one part of an on-going process. They must not only shelter and protect their charges during their school years, but also prepare them for the realities of a competitive world. Clearly, we must re-introduce the concept of achievement as the true route to self-esteem. Rewarding students regardless of (or worse, in spite of) their performance has produced only entitled and narcissistic people who feel entitled to their rewards. They have come to believe that if the world does not instantly give them what they want, it is unjust.

My father was a highly-decorated member of a very elite Army unit. My uncle was a star football player for famed coach Paul "Bear" Bryant. He was a member of the Texas A & M University team that endured the now-famous summer practices at Junction. My own Junction experience came in graduate school at the University of Virginia. One class (one of four taken that semester) required reading more than forty books. A fellow student asked the professor what we should do if, by chance, we didn't have time for the work. "That's easy," he answered, "withdraw from this university." What is the relevance here? We all learned that high expectations and competition—with the very real possibility of failure—did far more to build real self-esteem than any coddling could have done. I make it a point to return often to the University of Virginia campus. As I walk down The Lawn, I give silent thanks to the professors who not only wanted me to make a better living, but who taught me the skills to live a better life. Unfortunately, too many of our students have not had similar experiences. And for some reason, many theorists pronounce that to be a good thing.

Finally, we must admit that we do not live in Lake Wobegone, where all the children are above average.[18] Whether we want to admit it or not, talent (athletic or academic) is not evenly distributed in a population. We must return to a point where we can celebrate talent. Identifying and challenging America's best and brightest students should be an essential function of public schools. Yet over the course of the last generation, gifted students have become extraneous to curriculum. We have confined our gifted students to heterogeneous classrooms where they can tutor the underachieving. This is not the place for them. In Tolan's analogy, if a cheetah were kept in a small cage and fed only a steady diet of zoo chow, it will cease to run at all.[19] By not providing instruction appropriate for their abilities, schools offer gifted students the academic equivalent of zoo chow.

Most notably, the time has come for a new definition of egalitarianism. Schooling in a democracy should not mandate identical programs of study for every student, irrespective of their special needs, intellect, or

talent. Instead, schools must develop a curriculum that allows all students to reach their full potential. We must provide an equality of opportunity without insisting on an equality of outcomes. America's most eloquent champion of individual liberty, Thomas Jefferson, wrote both of a democracy of opportunity *and* an aristocracy of talent. Likewise, we can meet the needs of our gifted students without forsaking the average learner. In spite of the rhetoric of old and new theories of self-esteem and egalitarianism, we must provide the requisite challenges and rewards for talent and hard work.

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[13] Baines, L. Stanley, G. March/April 2001 "No More Shopping for Grades At B-Mart" 228.

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Book Review

Schools of Markets? Commercialism, Privatization, and School-Business Partnerships

Deron R. Boyles, Editor

Lawrence Erlbaum Associates, 2005

Reviewed by Jacqueline Romano
Texas Tech University

Do you know parents, teachers, administrators, staff, and district personnel who have participated in the buying or selling of merchandise in schools? Does your son or daughter sell wrapping paper, candles, cookies, or other gadgets as part of school fundraising? Many of us have either participated ourselves or had family members engage in these activities. In our minds, we may have assumed that doing business with corporations and businesses is the best option for addressing school budget shortages. We think of ourselves as helping our communities and children have opportunities that they would not otherwise have when we earn monies for school endeavors.

Schools and Markets, a collection of essays edited by Deron R. Boyles, provides us with the opportunity to look behind the curtain of these activities as well as many other school-business partnership activities. Looking behind the scenes we learn more about school-business relationships that are rarely questioned or acknowledged by the general public. Easy to read, Boyles' book covers a wide spectrum of themes, ideas and resources, and it allows us to hear the different voices of distress, disagreement, and resentment—voices we may have never heard before—caused by the influence of businesses in public schools. These voices invite us to analyze and evaluate our potential actions before making decisions. The contributors to the book, in conjunction with Boyles, ask us to stop and think before allowing corporations and businesses into our schools. They advise us to be cautious of school-business partnerships as part of the solution to increasing school funds.

They share their opinions and critical points of view, thus allowing the reader to see that the "book focuses on the central theme of commercialization but does so via such a distinctly multiplicity of examples that readers will arguably be struck by the sheer breadth and reach of corporate infiltration into schools and educational policy" (p. xi).

But it is clear that many of us do not stop, think or question how helping in fundraising will affect our students. We do not consider the loss of time and learning that occurs when schools are engaged in the pursuit of sales and profits. Nor do we think deeply about the kind of activities a school engages in when promoting the products that result from school-business partnerships. In order to promote products in schools, for example at the elementary level, teachers stop teaching to attend a general assembly. Their school may have hired a magician to do a couple of tricks and through his/her show promote a new product that will cause the school to receive extra funds for something that the school needs, e.g., a new board for weekly and monthly announcements. This kind of activity causes, in most cases, significant expenditure of human and material resources. So, among other questions, we may wish to ask: How much human labor, time and resources does it take to promote a product? Is making flyers to pass out to every child in a school, hiring the magician, and stopping teaching worth the trouble to gain ten or fifteen percent of the profits? Do schools gain or pay for these activities?

In each article, I noticed a general concern posed by the authors: stop, think, and see what is at stake—students' education, time, and money. We obviously need these injunctions because we so easily embrace a culture of consumerism. We even buy services that are convenient and attractive products from school stores, fast food products in cafeterias, so forth. Boyles' et al intention is to provide the reader with the unheard side of the school-business partnerships. More concretely, as the authors state, "our disposition is to disrupt what many readers may take for granted, namely that schools benefit from and therefore need corporate involvement" (p. x). It is difficult to ignore what is happening in schools after reading *Schools or Markets*. Although some readers may argue that the book is biased, the material is presented in a balanced manner. The authors provide the reader with various perspectives, both negative and positive, allowing the reader to stop and think, thus allowing people to make their own judgments. The book is divided into eleven chapters, each written by a different scholar. These scholars come from various backgrounds and interests, such as college professors, deans, school administrators, and parents, and provide the reader with different perspectives of capitalism's influence in schools.

The authors extend their analyses by asserting that corporate

businesses have become oligarchies that decide what is best for students. And parents, teachers and administrators do not challenge this commercialization in schools. By taking advantage of the ignorance of parents, teachers and administrators, these so-called benefactors play a duplicitous role. Businesses show an interest in supporting schools and helping them in any possible way. Their marketing skills appeal to the needs of schools. But Vanderschee points out that if corporations sincerely offer their help to schools, they would not force them to compete for money or force them to sell their products (p. 23). Unfortunately, schools do not understand the hidden agendas or set the rules for partnerships. Businesses do. To protect themselves and their educational mission, the authors suggest that schools should be cautious about collaborating with businesses and that "every school district in the country should adopt policies that assure positive public school—private sector relationships" (p. 113). Protecting themselves is important, the authors argue because "[c]hildren are attractive targets[,] they are a multibillion dollar market opportunity that makes it good business to sell to kids" (p. 70).

Boyles et al. suggest that before entering into a partnership, several considerations need to be addressed in school councils or school board meetings. There are six questions that they suggest are the basis of an initial analysis of school-business partnerships. The six suggestions are (1) What is the primary reason for entering into a school-business partnership? (2) Whose interests are being served? Who benefits the most? Who benefits in the long run? (3) How much time is given to the business part of the school-business partnerships? What amount, in terms of teacher (or administrator) salary, does the time equal on an hourly basis? (4) What is learned as a result of the partnership? What is the meaning conveyed to students? (5) Are business partners willing to share financial information with teacher and students regarding their benefits from the partnerships? (6) Can individual teachers or classes opt out of partnerships programs?

I consider this book a must-read book for pre-service and in-service teachers, principals, district administrators and anyone who has the power to make decisions about school-business partnerships. It provides policymakers, parents, and school administrators food for thought. Every chapter suggests that it is our job to be active and to "avoid being passive participants in the corporatizing of schooling" (p. 167). Indeed, Boyles' last chapter is aimed at critical reflection on our roles and our participation in the decision to engage in the school-business partnerships. He suggests that those involved in education teach our students to be critical and guarded of the so-called altruistic activities of business. Boyles and his colleagues, therefore, have accomplished their main goal, namely, to get the reader to stop, think, analyze and evaluate business-school relationship.

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